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**THE IMPLICATIONS OF THE EBC
SCORECARD ON THE SKILLS, ROLES,
AND TOOLS OF NAVY MTF COMPTROLLERS**

by

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June 1998

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**THE IMPLICATIONS OF THE EBC SCORECARD ON THE SKILLS,
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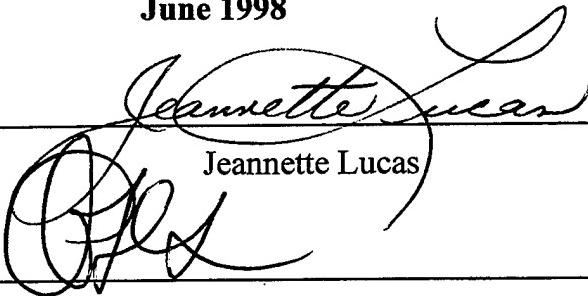
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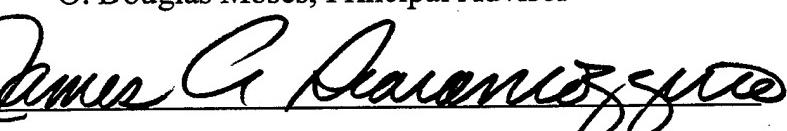
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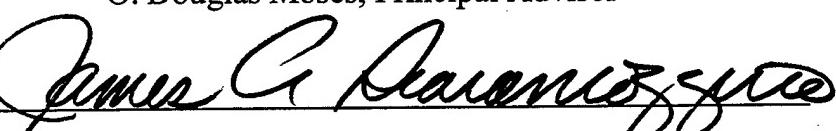
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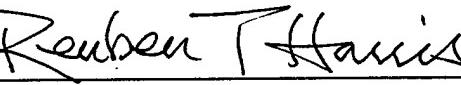
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ABSTRACT

United States health care system and the Military Health System (MHS) have long been faced with escalating health care cost. Implementing a managed care strategy, a system designed to integrate financing and delivery of appropriate health care services, has been viewed as the answer. As a result of implementing managed care, the MHS has transitioned from a workload-based financing methodology to a capitation methodology. Initially, the MHS implemented "modified capitation" financing. Effective FY-1998, the MHS began phasing-in the latest version of capitation, enrollment-based capitation (EBC). Under EBC, military treatment facility (MTF) Commanders' performance will be tracked and scored on an EBC Scorecard.

The purpose of this thesis is to present a baseline assessment, describing new skills, roles and tools which comptrollers of Navy MTF are adopting to improve their MTF's performance under the indices of the EBC Scorecard. To address this issue, MTF Comptrollers from four medium-sized Navy MTFs were asked to participate in a survey. The survey instrument was designed based on indices of the EBC Scorecard; strategies and initiatives available to improve performance on the EBC Scorecard; and skills and tools available to MTF Comptrollers. The results from this research indicates that MTF comptrollers are not involved in the implementation of EBC; nor are they aware of strategies and initiatives being implemented by private sector managed care organizations and the MHS; nor are they using some of the tools and skills which could improve their performance. MTF Comptrollers need to understand the implications of EBC on their future budgets.

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TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	BACKGROUND	1
B.	OBJECTIVE	7
C.	RESEARCH QUESTIONS	7
D.	SCOPE AND LIMITATIONS	8
E.	METHODOLOGY	8
F.	DEFINITIONS, ABBREVIATIONS, AND ACRONYMS	10
G.	ORGANIZATION OF STUDY	10
II.	BACKGROUND AND THE EVOLUTION OF THE MHS	11
A.	RISING HEALTH CARE COST IN AMERICA AND THE MHS	11
B.	FINANCING MODELS: FEE-FOR-SERVICE VS CAPITATION ..	13
C.	CAPITATION	13
D.	THE HISTORY OF MANAGED CARE AND FINANCING MODELS WITHIN THE MHS	15
1.	Past – Pre 1994, Volume Based Resource Allocation	15
2.	Present – FY 1994 Through FY 1997 (Modified Capita- tion Allocation Resource Model)	20
3.	The Future – FY 1998 and Beyond (Enrollment Based Capitation (EBC))	28
E.	PERFORMANCE REPORTING	33

1.	Private Sector MCOs Revenue/Expense Reports	34
2.	The MHS' Revenue/Expense Report - EBC Scorecard	35
3.	Comparison of the Private Sector MCO's Revenue/Expense Report and the MHS's EBC Scorecard	38
F.	SUMMARY	39
III.	METHODOLOGY	41
A.	INTRODUCTION	41
B.	EBC SCORECARD INDICES	41
1.	EBC Scorecard - Revenue Indices	42
2.	EBC Scorecard - Expense Indices	46
3.	Strategies and Initiatives to Improve Quality, Contain Cost, and Ensure Access	51
C.	SKILLS AND TOOLS AVAILABLE TO MTF COMP-TROLLERS	54
1.	Skills	55
2.	Tools	56
3.	Summary of the Survey Instrument	60
D.	PARTICIPANTS	61
IV.	SURVEY RESULTS	63
A.	INTRODUCTION	63
B.	DEMOGRAPHICS OF RESPONDENTS	63
C.	EBC SCORECARD	64

1.	Q1. ² Did you ensure that the health of your enrolled user population was assessed? (Yes/No) ³	64
2.	Q2. If you answered yes to Q1, how was the health of the enrolled population assessed? (a) HEAR, (b) HEDIS, (c)Claims-based assessment, (d) Other. (Yes/ No)	64
3.	Q3. Who interpreted your survey? (a) Epidemiology (in-house or contractor), (b) You or your staff, (c) The Managed Care Department, (d) Other. (Yes/No)	64
4.	Q4. When is the next assessment survey scheduled? (a) No survey scheduled, (b) Recently (within the past 3 months) completed a survey, no survey scheduled, (c) Survey schedule to be conducted within the next 6 months, (d) Survey schedule to be conducted within the next 12 months. (Yes/No)	65
5.	Q5. Did you participate in determining the MTFs maximum capacity? (Yes/No)	65
6.	Q6. Do you feel that it is your responsibility to ensure that the following initiatives are implemented? (a) Disease management, (b) Staffing efficiency, (c) Agressive marketing, (d) Resource sharing, (e) Other. (Yes/No)	65
7.	Q7. Do you feel that it is your responsibility to ensure that the following programs are implemented to reduce patient demand? (a) Telephone-based decision support, (b) Computer-based decision support, (c) Self-care pamphlets, (d) Health Promotion programs, (e) Passive media tools, (f) Other. (Yes/No)	66
8.	Q8. Have you analyzed which medical and administrative services should be offered in-house and which ones should be outsourced? (Yes/No)	67
9.	Q9. If you answered no to Q8, who determines which services are offered in-house or outsourced? (a) The Managed Care Department, (b) The Patient Adminis-tration Department, (c) The Medical Staff, (d) Other. (Yes/No)	67

10. Q10. What efforts have you ensured were taken over the past year to market the MTF to PRIME user population (above and beyond status quo required improvements and equipment purchases)? (a) Budgeted for/purchased infrastructure improvements, (b) Budgeted for/purchased equipment for clinical areas, (c) Budgeted for/purchased/ outsourced technology, (i.e., MRI, CAT scan, computers, information systems, and etc.), (d) Other. (Yes/No) 68
11. Q11. What cost containment programs have you recommended for implementation aimed at incentivizing providers? (a) Risk Pool whereby revenue-generating providers are given a portion of the revenue, (b) Other. (Yes/No) 68
12. Q19. Are you taking steps to ensure that the satisfaction of your PRIME enrollees is assessed annually? (Yes/No). If yes, how is it assessed? (a) HEDIS, (b) HEAR, (c) Other. (Yes/No) 69
13. Q20. What percentage of your FY96, FY97, and FY98 APF did you obligate/budget to be spent in the following areas? Marketing, Smoking Cessation, Alcohol Abuse, Childhood Immunizaiton, Health Promotion, Other Risky Behavior (Specify) 69
14. Q21. What are you doing to reduce purchased care cost? (a) Implemented resource-sharing agreements, (b) Negotiated supplemental care arrangement, (c) Work closer with consortium MTFs, (d) Other (Yes/No) 69
15. Q22. When there are variances between budgeted purchased care cost and actual cost, what do you do? (a) Discuss variance with specific referring provider, (b) Discuss variance with Managed Care Department, (c) Other. (Yes/No) 70
16. Q25. Have you supported the implementation of hospital protocol for the five major prevalent diseases, which can impact on inpatient care? (Diseases listed on the survey were diabetes, hypertension, asthma, heart disease, and Births). (Yes/No) 70

D. SKILLS	70
1. Q12. In addition to your role as a Comptroller, what are some of your other roles as a result of implementation of EBC? (a) Planner, (b) Change agent, (c) Other. (Yes/ No)	71
2. Q13. Which of the following skills are you using as a result of EBC? (a) Change Management, (b) Management Audits, (c) System Thinking, (d) Other. (Yes/ No)	71
3. Q15. How often do you discuss the MTFs performance on the EBC Scorecards with the following: Commanding Officer (C/O), Executive Officer (X/O), Director for Administration (DFA), Director for Surgical Services (DSS), Director for Nursing Services (DNS), Director for Medical Services (DMS), Director for Ancillary Services (DAS), Department Heads (DHs) (i.e., Pharmacy, Lab, X-ray), Individual providers, Individual nurses (i.e., or nurse), Other (Options for each broken-down by Weekly, Monthly, Other, and Never).	71
4. Q16. Have you taken steps to ensure that providers and MTF staff personnel are aware of the EBC Scorecard criteria? (Yes/No)	72
5. Q17. Are you taking steps to ensure that providers and MTF staff personnel are trained on the EBC Scorecard and its' impact on resources? (Yes/No)	72
6. Q18. Are you taking steps to ensure that providers have access to information systems for decision-making? (Yes/No)	72
7. Q23. As a cost containment effort, have you reduced your civilian hiring? (Yes/No)	72
8. Q26. Are you involved with correcting problems with the following information systems? (Please indicate which of the functions fall under your control) MEPRS, CHCS, ADS, DEERS, Other. (Yes/No)	73

9.	Q27. Are you a member of any clinical committees/PAT teams (i.e., Pharmacy and Therapeutic Committee)? (Yes/No)	73
10.	Q31. Have you recommended that your MTF Strategic Plan include the six EBC Scorecard criteria/indices? (Yes/No)	73
E. TOOLS		73
1.	Q14. What information system do you use to forecast (1) Enrollment, (2) Capacity, (3) Utilization, (4) Expenses, (5) Severity of inpatient and outpatient workload and (6) TPC? Use numbers 1 through 6 to indicate which system is used for each forecast type. (Information systems listed: BUMED's SMART, CEIS, 3M Risk Assessment, Other)	73
2.	Q24. Have you recommended the implementation of the most efficient organization (MEO) where possible to contain cost? (Yes/No)	74
3.	Q28. Are you ensuring that the cost, quality, and variation of network providers are monitored with IAMETER or some other software? YES/NO (Please indicate the name of the software being used to perform this function).	74
4.	Q29. Are you involved with risk adjustment analysis? (Yes/No)	74
5.	Q30. Are you ensuring that physician profiling on in-house physicians is conducted and that variations in practice patterns for the same severity and DRG are addressed? (Yes/No)	74
F. SUMMARY		75
V.	SUMMARY AND CONCLUSIONS	77
A.	SUMMARY	77
B.	RESEARCH QUESTIONS	77

1.	Primary Question: What are comptrollers doing to improve their MTF's performance under the EBC Scorecards Indices?	77
2.	Subsidiary Question (SQ) 1: What initiatives have private sector MCOs and the MHS implemented that MTF Comptrollers can adapt to improve their MTF's score on the EBC Scorecards?	80
3.	SQ2: What do comptrollers view as their role in improving their MTFs performance on EBC Scorecards?	81
4.	SQ3: What skills do comptrollers need to help them improve their performance on the EBC Scorecards?	83
5.	SQ4: What other tools beside CEIS and SMART should Comptrollers incorporate into their "tool box?"	83
C.	CONCLUSIONS	83
D.	RECOMMENDATIONS FOR FUTURE RESEARCH	85
APPENDIX A. SURVEY		87
APPENDIX B. GLOSSARY OF TRICARE/MANAGED CARE TERMS AND DEFINITIONS ⁴		95
APPENDIX C. HISTORY OF RECOMMENDATIONS AND ACTIONS ON CAPITATION FINANCING IN THE DOD'S MEDICAL PROGRAM ⁵		103
LIST OF REFERENCES		105
INITIAL DISTRIBUTION LIST		109

LIST OF FIGURES

- Figure 2.1. Fee-for-Service vice Capitation 13

LIST OF TABLES

Table 2.1.	Private Sector MCO Revenue and Expense Summary Report	34
Table 2.2.	EBC Scorecard (Page 1: Revenue)	36
Table 2.3.	EBC Scorecard (Page 2: Resources Used)	37
Table 2.4.	EBC Scorecard Reconciliation	38
Table 3.1.	Strategies and Initiatives to Improve Quality, Contain Cost and Ensure Access	51
Table 3.2.	EBC Indices Linked to Survey Questions	61
Table 4.1.	Demographics of Respondents	63
Table 4.2.	Summary of Answers to Q6	66
Table 4.3.	Summary of Answers to Q7	67
Table 4.4.	Summary of Answers to Q21	70
Table 5.1.	Summary of EBC Scorecard Indices, Survey Questions Answers and Research Questions	78

ACRONYMS AND ABBREVIATIONS

AAMA	American Academy of Medical Administrators
ACHE	American College of Health Care Administrators
AD	Active Duty
ADFM	Active Duty Family Member
ADS	Ambulatory Data System
AWARE	Annual Work and Resource Evaluation
BPA	Bid Price Adjustment
BUMED	Bureau of Medicine and Surgery
CBO	Congressional Business Office
CEIS	Corporate Executive Information System
CHAMPUS	Civilian Health and Medical Program for the Uniform Services
CHCS	Comprehensive Health Care System
COB	Coordination of Benefits
CONUS	Continental United States
DEERS	Defense Enrollment Eligibility Reporting System
DHP	Defense Health Program
DoD	Department of Defense
DoN	Department of the Navy

EBC	Enrollment Based Capitation
EME	Executive Medical Education
ER	Emergency Room
GAO	General Accounting Office
GME	Graduate Medical Education
GNP	Gross National Product
HEAR	Health Enrollment Assessment Review
HEDIS	NCQA Healthplan Employer Data and Information Set
HEW	Health, Education and Welfare
HMO	Health Maintenance Organization
HSO	Health Services Operations
IDB	Integrated Database
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
MAJCOM	Major Command
MCO	Managed Care Organization
MCS	Managed Care Support
MCSC	Managed Care Support Contracting
MEPCOM	Military Entrance and Processing Command
MEPRS	Medical Expense and Reporting System
MHSS	Military Health Services System

MHS	Military Health System
MILPERS	Military Personnel
MTF	Military Treatment Facility
NADD	Non-Active Duty Dependent
NCQA	National Committee for Quality Assurance
NAS	Non-Availability Statement
NHSO	Naval Healthcare Support Office
NH	Naval Hospital
NRC	National Research Corruption
O&M	Operations and Maintenance
O&M, N	Operations and Maintenance, Navy
OCONUS	Outside Continental United States
OCHAMPUS	Office of the Civilian Health and Medical Program for the Uniform Services
OMB	Office of Management and Budget
OPHSA	Office for Prevention and Health Services Assessment
OSD (HA)	Office of the Secretary of Defense (Health Affairs)
PCM	Primary Care Manager
PMPM	Per Member Per Month
PPO	Preferred Provider Organization
POS	Point-of-service

RCMAS	Retrospective Case Mix Analysis System
RHS	Regional Health Services
RMC	Regional Medical Command
RUMR	Redistributed Uniform Management Report
SMART	BUMED's Summarized Medical Analysis Resource Tool
Space-A	Space-Available
STARS	Standard Accounting and Reporting System
STARS/FL	Standard Accounting and Reporting System/Field Level
STS	Specialized Treatment Services
TOPS	Three-year Obligation and Plan Status
TPC	Third Party Collection
TFMEEP	TRICARE Financial Management Executive Education Program
TRICARE	Tri-Service Health Care
TSO	TRICARE Support Office
U.S.	United States

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L. INTRODUCTION

The purpose of this thesis is to present a baseline assessment, describing new skills, roles and tools which comptrollers of Navy Medical Treatment Facility (MTF) are adopting to improve their MTF's performance under the indices of the enrollment-based capitation (EBC) Scorecards. It examines initiatives¹ implemented by private sector managed care organizations (MCOs) to contain cost, ensure access, and maintain quality of care that MTF Comptrollers can employ to improve their EBC Scorecards performance. It will also present some of the initiatives already employed by the Military Health System (MHS) that can influence MTFs performance on their EBC Scorecards.

A. BACKGROUND

The United States (U.S.) has long been experiencing escalating health care cost. Today, the U.S. spends more money on health care per person than any other nation in the world (McNamee, 1996). Many reasons have been given to explain why health care cost has increased. McNamee (1996) writes:

High rates of inflation in medical costs and excessive use of expensive procedures, which provides limited improvement in health outcomes, continues to drive up costs. At the same time, the number of people without insurance keeps rising.

Yet, the question is asked, "Are Americans getting their money's worth?" "The answer is debatable, but more and more people are questioning whether the increased spending on healthcare cost is significantly improving the health status of the nation"

¹ Throughout this thesis the term initiatives and strategies are interchangeable.

(Freeborn and Pope, 1994). As a result, the military and civilian sectors began looking into new strategies to improve the performance of the U.S. health care system. Managed care was deemed as the most promising strategy to reform the health care delivery system (McNamee, 1996). The goal of manage care is to integrate the financing and delivery of appropriate health care services to covered individuals (Thompson, 1996).

In 1973, the President of the United States ordered the Department of Defense (DoD), the Health, Education and Welfare (HEW), and the Office of Management and Budget (OMB) to conduct a study on health care within the military. One of the nine recommendations of this study stated that "resource programming and budgeting for the MHSS in CONUS should be done on a capitation basis" (Report of the Military Health Study, 1975). Prior to Fiscal Year 1994 (FY 1994) the MHS allocated resources based upon the volume of workload produced by MTFs. MTFs were rewarded with larger budgets for generating more workload without always being accountable for the necessity of the workload generated (OASD (HA), 1993). The civilian sector operated under the same methodology, which is termed "fee-for-service." Just like the military, the civilian sector was reimbursed based on the number of visits or services provided (i.e., inpatient admissions and bed days, ambulatory visits, and ancillary procedures). This financing methodology provided no incentive to reduce usage.

Almost 19 years after the study on health care in the military, the Office of the Assistant Secretary for Health Affairs (OASD (HA), hereafter referred to as Health Affairs, announced a change in the financing methodology (OASD (HA), 1997). Effective FY 1994,

the MHS underwent a tremendous shift from a volume intensive workload resource allocation methodology to a population-driven catchman area capitation model-- "modified-capitation." Health Affairs directed the adoption of modified capitation to contain health care cost. Health Affairs realized that the modified capitation methodology was not a true form of capitation but used it as a transitional methodology to ease the burden of converting from a fee-for-service (workload) based system at the MTF level to an enrollment (capitated) strategy. Modified capitation was the first step in introducing the MHS to a managed care model and capitation financing. There were four components to the modified capitation model: 1) The establishment of the Defense Health Program (DHP) appropriation; 2) The conversion of the Civilian Health of the Uniformed Services (CHAMPUS) to the TRICARE program with a triple option plan and Specialized Treatment Services (STS); 3) The implementation of the Managed Care Support (MCS) contracts; and 4) The creation of 12 Regional Lead Agents (OASD (HA), 1997).

The first component of the modified capitation, the DHP was a global budget, which uses as its numerator all resources attributed to a Military Department (Army, Navy or Air Force) or MTF and uses as its denominator estimated user population as a surrogate for enrolled population. The DHP required the Medical Departments to develop their own Service-specific methodology, or methodologies, to reallocate resources to MTF by catchment area. At a minimum, the methodology, or methodologies, had to contain total cost for Operation & Maintenance (O & M) Direct Care, O & M CHAMPUS, Military Personnel

(MILPERS), and population. MTF Commanders were responsible to provide care to all eligible beneficiaries within a catchment area (OASD (HA), 1993).

The second component, the TRICARE program, offers eligible military beneficiaries three choices in which to get their care: TRICARE Prime (HMO-like option); TRICARE Standard (formerly called CHAMPUS); and TRICARE Extra. Active duty members are automatically enrolled in TRICARE Prime. All other eligible beneficiaries are offered the option to enroll into TRICARE Prime or choose their own provider and pay a higher deductible and copayment for using TRICARE Standard or TRICARE Extra. In addition, STS are regional military or civilian treatment facilities designated to provide certain high-cost medical care.

The third component, MCS contracts were negotiated to provide the civilian health care services within the Lead Agent regions. The final component, the 12 Regional Lead Agents were selected military medical centers within a region who were assigned to oversee the delivery of care within multiple (overlapping) catchment areas. Lead agents were to work collaboratively with other MTFs within their region to plan and coordinate the health care within their catchment areas (OASD (HA), 1997).

Under the modified capitation model, the MTF's DHP funding was categorized into three distinct categories. Category 1 is Military Medical Support (Aeromedical Evacuation, Overseas Health Care, Military Entrance and Processing Command (MEPCOM), Environmental Health, and Initial Outfitting Equipment) and is non-capitated. Category 2a is Military Unique Capitated (Readiness Planning and Exercises, Dental Care, Preventive

Medicine and Occupational Medicine, Military Funded Emergency Leave, Veterinary Services and Physiological Flights) and is capitated based on military active duty endstrength. Category 2b is Military Unique Capitated (Education and Training) and is capitated based on medical active duty end-strength. Finally, Category 3 is referred to as the HMO equivalent and is capitated on estimated user population (OASD (HA), 1993).

As previously mentioned, the modified capitation methodology was not a true form of capitation and, thus, was the primary reason for MHS continuing to refine and define the DoD managed care capitation model. On 1 October 1997, the OASD (HA) directed the MHS to begin phasing-in EBC. The fundamental difference between the modified capitation and the EBC is that EBC provides funding allocation to a specific MTF based on the TRICARE Prime enrolled population whereas the modified capitation model allocated funds to the MTF based on estimated user population (OASD (HA), 1997). EBC focuses on DHP Category 3 account, which accounted for 75% of the DHP budget allocation in FY 1997 (OASD (HA), 1997). The motivation to develop EBC stemmed from the necessity to enable MTF commanders to have full accountability for all the resources used by their TRICARE PRIME enrolled population. EBC would empower MTF commanders to provide high quality, appropriate cost-effective health care to their beneficiaries (OASD (HA), 1997). Unlike in the past, the commander will know which TRICARE PRIME patients they are financially responsible for and how care is given for these patients. EBC was conceived to realign financing with the operational aspects of the TRICARE program. EBC was designed to motivate and reward MTF Commanders for maximizing their enrolled population.

MTF's Commanders performance will be tracked and scored with the EBC Scorecards. The EBC Scorecard has two pages. Page 1 (Revenue) and Page 2 (Resources Used/Expenses). At this time, only Page 1 have been deployed to MTF for monthly reconciliation. Health Affairs expects to have Page 2 available for use in time for the full implementation of EBC, which is scheduled for FY 1999. The primary indices of the EBC Scorecards are: target/budgeted TRICARE Prime enrollment; Space Available (A) care provided to non-enrollees; care purchased for that MTF's TRICARE Prime enrollees; expenses incurred in support of the care provided; Third Party Collection (TPC) reimbursements; and Resource Sharing (OASD (HA), 1997).

Health Affairs encourages MTF Commander to work with their executive staff to implement EBC. Historically, Navy MTF Commanders have depended upon their comptroller for financial advice. Hence, MTF comptrollers have relied upon financial reports generated within the official accounting system, Standard Accounting and Reporting System/ Field Level (STARS/FL). Capitation financing has not precluded the use of financial reports generated in STARS/FL nor has it changed the budget process (McDonald, 1998). Unfortunately, STARS/FL does not generate the level of data that MTFs need to manage at the local level. STARS/FL was developed to report financial information to higher authority (i.e., the DoD, BUMED, etc.) rather than generate relevant data needed to make local decisions (Holmes, 1996). Health Affairs emphasizes that "besides establishing and communicating a vision, the MTF Commander must include data integrity as a top priority" (OASD (HA), 1997). Standard data systems (i.e., Comprehensive Health Care

System (CHCS), Medical Expense Performance and Reporting System (MEPRS), etc.) are foundational to EBC. Information must be accurate and complete. MTF Commanders have always been accountable for data generated by their MTF, but now the visibility of the EBC scorecards and the MTF “price list” will make it much easier to assess the level of command attention to information systems (OASD (HA), 1997). Health Affairs states, “maximizing enrollment in TRICARE Prime and the integrity of data are two of the most important MTF Commander’s responsibilities under EBC” (OASD (HA), 1997). Now with EBC, MTFs are incentivized to ensure the quality of data entered into these systems or pay the consequence of a reduced budget.

B. OBJECTIVE

The purpose of this research is to provide a baseline assessment of what comptrollers are doing to improve their MTF’s performance under the EBC Scorecards indices. Additionally, this assessment will provide useful information to train comptrollers and to influence the skills and tools they use to perform in a capitated environment.

C. RESEARCH QUESTIONS

The following research questions were analyzed and evaluated during this thesis:

Primary: What are comptrollers doing to improve their MTF’s performances under the EBC Scorecards indices?

Subsidiary:

1. What initiatives have private sector MCOs and the MHS implemented that MTF Comptrollers can adapt to improve their MTF’s score on the EBC Scorecards?

2. What do comptrollers view as their role in improving their MTFs performance on EBC Scorecards?
3. What skills do comptrollers need to help them improve their performance on the EBC Scorecards?
4. What other tools beside CEIS and SMART should comptrollers incorporate into their “tool box”?

D. SCOPE AND LIMITATIONS

This thesis will evaluate initiatives implemented by private sector MCOs that MTFs comptrollers can adapt to improve their MTF’s performance on the EBC Scorecards. It will present the changing roles and responsibilities of MTF comptrollers as they adapt to performing under the EBC Scorecards indices. In addition, a discussion on the rational for adopting various tools, i.e., system thinking and change management, will be presented to help comptrollers understand underlying cause and effect mechanism and the dynamics of change. It will also, present some of the tools currently available to comptrollers that they can use to improve efficiency.

This thesis is limited to discussions regarding medium-size Navy MTFs and DHP Category 3 direct care funding. It is primarily focused on EBC Scorecard Page 1 (Revenue). It is written from the perspective of presenting skills and tools that comptrollers can use to improve their decision-making and management under a capitated strategy.

E. METHODOLOGY

Research for this thesis was conducted in five phases. First, the author developed a background understanding of the MHS and the Navy’s managed care and financing models

focusing on performance reporting by reviewing various DoD and Navy instructions, memorandums, and handbooks. Second, the author developed an understanding of initiatives implemented by private sector MCOs through an extensive literature search. Third, the author talked to various key personnel at DoD, BUMED, and Navy MTFs to answer the research questions.

Finally, the author constructed a survey that operationally defines the EBC Scorecards indices and assesses the roles and skills of the MTF Comptroller. The survey can be found in Appendix A. It was constructed based upon three premises/principles. First, capitation drives the need for population health management strategies (Scaramozzino, 1998). Second, as a result of population health management, MCOs have developed strategies to contain cost while assuring access and quality, which are cost drivers such as enrollment, utilization, efficiency, and patient mix (Cleverly, undated). The third premise/principle is that performance under EBC will be evaluated in terms of specific metrics contained in the EBC Scorecard. The EBC Scorecards metrics include 1) target/budgeted TRICARE Prime enrollment; 2) Space-Available (A) (Space-A) care provided to non-enrollees; 3) Care purchased for that MTF's TRICARE Prime enrollees; 4) Expenses incurred in support of the care provided; 5) TPC reimbursements; and 6) Resource Sharing (OASD (HA), 1997).

The MTFs selected were based on their similarity in size and mission. The majority of the MTFs selected have Family Practice medical education programs and will be able to provide a service to their enrolled population. Effort was made to determine BUMED's

definition of a medium-size MTF but a definitive definition was not located. Based on conversations with BUMED staff (Pellack, 1998), it was determined that the following MTFs are similar in size and mission and were asked to participate in the survey: Naval Hospital (NH) Bremerton, Washington; NH Camp Lejeune, North Carolina; NH Jacksonville, Florida; NH Pendleton, California and NH Pensacola, Florida.

F. DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

Definitions are presented in Appendix B. A list of abbreviations and acronyms is presented after the Table of Contents.

G. ORGANIZATION OF STUDY

The remainder of this thesis is divided into four chapters. Chapter II is the background and the evolution of managed care and capitation financing within the MHS. It introduces revenue/expense (performance) reporting used by private sector MCOs and the EBC Scorecard that will be used by MHS to track performance. Chapter III outlines the indices of the EBC Scorecard and the development of the survey instrument. It discusses initiatives implemented by private sector MCOs and the MHS that can be adopted to improve performance on the EBC Scorecard. Chapter IV presents the MTF Comptrollers responses to the survey. Chapter V presents an analysis of answers to the questionnaire; draws conclusions; and offers recommendations for future research.

II. BACKGROUND AND THE EVOLUTION OF THE MHS

This chapter begins with a brief presentation on health care cost in America and the MHS. Next, the difference between fee-for-service resourcing and capitation financing is presented. Then, the discussion covers the evolution of the managed care and capitation financing models within the MHS, which addresses the transition from a workload volume intensive, fee-for-service type resource allocation methodology to a capitation methodology, EBC. Finally, expense and revenue (performance) report for private sector MCOs and the EBC Scorecard for the MHS will be presented along with the similarities between the two reports.

A. RISING HEALTH CARE COST IN AMERICA AND THE MHS

Over the past 40 years, the cost of health care in United States has increased at an alarming rate. In 1960, Americans consumed approximately 5.3 percent of gross national product (GNP) for health care, 10.2 percent by 1982, and 12 percent of GNP by 1990. There are many indications that this demand level will continue (Prince, 1992).

During this same period, health care spending for the federal government was also rapidly rising. The Congressional Budget Office (CBO) reported that federal spending for health care was 11 percent of the total federal budget in 1980 and 17 percent in 1993 (CBO, 1993). In the DoD, health care cost (including Civilian Health of the CHAMPUS went from approximately \$4 billion (3%) in Fiscal Year (FY) 1981 to about \$14.5 billion (6%) in FY 1993 (CBO, 1993). In FY 1998, the DHP budget is projected to be \$15.7 billion or 6% of the total defense budget (Doyle, 1998). From 1990 to 1998, while total

eligible beneficiaries decreased, health care cost continued to increase. One reason for this increase within the DHP budget is the change in the beneficiary population mix. According to Doyle (1998), from 1990 to 1998, active duty personnel and their family members population decreased 29.2 and 27.9 percent, respectively, while retirees and their dependents younger than age 65 and retirees and their dependents older than age 65 increased 0.5 and 35.1 percent, respectively, for a total decrease in eligible beneficiaries of 12.5 percent. Total eligible population younger than age 65 have decreased 17.9 percent while eligible population older than 65 have increased 35.1 percent.

Many reasons have been given for escalating health care cost in America and the MHS. Some of the more common reasons include: increased utilization of services, expanded use of higher-cost medical technologies, third-party payment systems, and insufficient emphasis on preventive care. With regard to the MHS, Neil Singer, Acting Assistant Director, National Security Division, contributes the following reasons for escalating health care cost in the MHS:

...a benefit structure with low cost sharing requirements that encourages excessive use by patients, a paucity of constraints on providers to curb the delivery of unnecessary and inappropriate health care. These problems are compounded by the interplay between the services' wartime and peacetime missions (CBO, 1994).

As a result of increased cost, both the military and civilian sectors began to look for strategies to reduce cost yet assure quality and access. Both the military and civilian sectors viewed managed care as the answer. Managed care is a term used to describe the coordination of financing and provision of health care to produce high-quality health care on a cost-effective basis (HIAA, 1996).

B. FINANCING MODELS: FEE-FOR-SERVICE VS CAPITATION

As a result of the health care industry implementing managed care, a new financing model was introduced, capitation. Historically, most health care cost was reimbursed on a fee-for-service basis. However, with the implementation of managed care the financing model shifted from fee-for-services to capitation. Figure 2.1 (Horowitz, 1996) outlines some of the differences between fee-for-service vice capitation.

	Fee-for-Service	Capitation
Volume Measures	<ul style="list-style-type: none">▪ Visits, procedures, hospital days▪ Market shares of admissions, outpatient cases	<ul style="list-style-type: none">▪ Visits, procedures, hospital days per 1,000 members▪ Market share of covered lives
Performance Measures	<ul style="list-style-type: none">▪ Cost per visit, procedure, or case▪ Contribution margin per visit, procedures, or case	<ul style="list-style-type: none">▪ Cost per life
Management Focus	<ul style="list-style-type: none">▪ Building volume▪ “Maximizing revenue”	<ul style="list-style-type: none">▪ Correct modality▪ Cost per unit of service

Source: Horowitz, J., VP, Jennings Ryan & Kolb, Briefing Papers, “Assessing Organizational Readiness for Capitation and Risk Sharing,” ACHE, Managing Under Capitation, Western Conference, 14 November 1996.

Figure 2.1. Fee-for-Service vice Capitation

C. CAPITATION

Capitation is defined as a “method of payment for health services in which a physician or hospital is paid a fixed amount for each enrollee regardless of the actual number or nature of the services provided to each person (HIAA, 1996).” Capitation gives MCOs and providers the ability to predict the expenses and the revenues that their enrolled population will generate. The crucial elements of capitation are:

- Care is prepaid with a predetermined, agreed upon price, and does not vary according to value or intensity of services;

- The payment is tied to specific capitated patients, typically through some type of an enrollment system; and
- The provider bears the full financial risk if expenditures exceed payment (Aiken, 1989).

Capitation incentivizes providers to be cost-efficient. Leading MCOs publicly recognize and give significant financial and nonfinancial rewards to those providers who achieve high levels of customer satisfaction (Southam, 1996). Some of the reasons why MCOs like capitation are:

- Shifts financial risk to providers (risk is the potential to lose money, earn less money, spend more time without additional payment),
- “Aligns” financial incentives of MCO and providers,
- Reduces need for “utilization review police,”
- Improves budgeting/predictability/stability of profit margins, and
- Less costly to administer (Turnbull, 1996).

Providers accept capitation arrangements for various reasons. Some of the reasons are:

- Protect/increase patient volume,
- Predictable, timely cash flow,
- Shift focus to prevention/wellness,
- Reduce paperwork,
- Lessen micromanagement by MCO/increase autonomy,
- Potential to benefit from cost-effective practice/capture savings, and
- Population-based payment improves ability to monitor patients and plan services (Turnbull, 1996).

D. THE HISTORY OF MANAGED CARE AND FINANCING MODELS WITHIN THE MHS

The evolution of managed care and the capitation financing model within the MHS can be divided into three phases; the Pre-FY 1994, Volume-based (fee-for-service) resource allocation; the FY 1994 through FY 1997, Modified Capitation-Based Resource Allocation Methodology; and the FY 1998 and beyond, EBC Methodology.

1. Past -- Pre 1994, Volume Based Resource Allocation

In a CBO statement Neil Singer (CBO, 1994) describes the MHS as a very complex health system consisting of a direct delivery system of military hospitals and clinics (MTFs) and an insurance-like program referred to as CHAMPUS (CBO, 1994). The MHS is responsible for providing care to more than 8.5 million beneficiaries of which approximately 6.5 million actually choose to use the MHS. The other 2 million elect to receive their care from other sources. The MHS has a twofold mission: wartime readiness, which means having the capability to meet the armed services' wartime needs; and the provision of medical care during peacetime to uniformed personnel and other eligible beneficiaries, including dependents of active-duty personnel, retirees, their dependents, and survivors (CBO, 1994).

a. *Direct Delivery System*

As previously mentioned, the MHS is divided into two systems, the primary is the direct delivery system which is an extensive system of DoD operated hospitals and clinics, staffed by civilian and military personnel to provide care to active duty and other eligible beneficiaries. Three-fourth of all health care services is provided

through the direct delivery system, while the other one-fourth is provided through CHAMPUS. Active duty personnel are required to receive their care at MTFs. Active duty and their family members are the primary users of the direct delivery system, they make-up one-half of the user population; the other half is consumed by retirees, their family members, and survivors (GAO, 1995).

The direct delivery system consists of 600 MTFs, of which 127 are military hospitals and over 500 clinics for all three Services. The MHS employs some 48,000 civilians, 135,000 active duty personnel and another 91,000 personnel in the Selected Reserves and the National Guard (GAO, 1995).

Over the past five-years, expenditures for the direct delivery system have slightly decreased. In 1993, expenditures for the direct delivery system were \$3.9 billion (GAO, 1995) while in 1998 the direct delivery system expenditures are projected to be \$3.2 billion (Doyle, 1998).

There are three categories of MTFs in the direct delivery system. They are:

(1) Medical Centers are large 200 to 1,000 bed facilities which offers both inpatient and outpatient care. Although they are few in number, medical centers have provided approximately 57 percent of the inpatient care and 30 percent of the outpatient care (GAO, 1995).

(2) Community Hospitals are medical facilities with typically fewer than 200 beds. They offer inpatient and outpatient care but usually handle less complex cases than medical centers. In 1992, community hospitals handled

approximately 43 percent of the inpatient care and about 60 percent of the outpatient care (GAO, 1995).

(3) **Clinics** are generally small facilities, which offers a limited range of services usually outpatient care. They handled approximately the remaining 10 percent of the outpatient workload (GAO, 1995).

b. CHAMPUS

Historically, during peacetime, MTFs have been unable to meet demand due to limited capacity. In 1956 the Dependents' Medical Care Act (PL 84-569) and the Military Medical Benefits Amendments of 1966 (PL 89-614) legislative action established CHAMPUS to argument the direct delivery system and to give family members of active duty personnel, retirees and their families, and survivors access to care in MTFs on a space-available basis. However, when care is not available in MTFs for non-active-duty beneficiaries, these beneficiaries can receive health care from the private sector through CHAMPUS. CHAMPUS is the DOD's form of a fee-for-service insurance plan that covers most of the cost of care that beneficiaries receive from a civilian provider when care is not available at a MTF (CBO, 1994).

Family members of active duty personnel, retirees and their families' members, and survivors under age 65 are automatically eligible for CHAMPUS. At age 65, beneficiaries are no longer eligible for CHAMPUS because they become eligible for Medicare. However, Medicare eligible beneficiaries may still receive care through the direct delivery system on a space-available basis.

CHAMPUS is the secondary delivery system. To help ensure full utilization of the primary direct delivery system, eligible beneficiaries have to receive a "non-availability statement" (NAS) from the MTF before they can receive health care from a private sector inpatient hospital and some high cost outpatient care if the beneficiary lives within a 40-mile radius of an MTF. Beneficiaries living outside the 40-mile radius of the MTF are not required to obtain a NAS.

Expenditures for CHAMPUS have increased slightly from 1993 to 1998. In FY 1993, CHAMPUS expenditures were approximately \$3.5 billion (GAO, 1995). CHAMPUS will comprise approximately \$4.1 billion of the DHP budget in 1998 (Doyle, 1998).

c. Financing Methodology

Historically, MTFs were financed on the basis of the volume of services provided (i.e., inpatient admissions and bed days, ambulatory visits, and ancillary procedures). The more services a MTF produced, the larger its budget grew (OASD (HA), 1997). There was no incentive to reduce cost. Instead the incentive was to increase workload. In 1973, the President of the United States ordered that a study be conducted on health care in the military. One of the nine recommendations from that study was that "resource programming and budgeting for the MHSS in CONUS should be done on a capitation basis" (Report of Military Health Care Study, 1975). See Appendix C for the History of Recommendations and Actions on the Use of Capitation Financing in the Department of Defense's Medical Program.

MTFs under the direct care system receive two types of funding: direct O&M funding and reimbursable funding. Direct funds are appropriated from Congress. Funding is passed to the MTF from Congress via the DoD, Department of the Navy (DoN), BUMED, and Naval Healthcare Support Office (NHSO). MTF's received Operations and Maintenance, Navy (O&M, N) appropriated funds to finance the cost of the day-to-day operation and maintenance of the facility. O&M, N is an annual appropriation which is an expense-type appropriation. O&M, N funds are used to pay civilian salaries and fringe benefits, maintenance contracts, and purchase supplies, and equipment. In addition, MTF may also receive "one-time costs" to purchase special one-time items such as contingency requirements, i.e., vaccines which will be required just for that fiscal year.

Unlike direct funding, reimbursables are generated when an MTF provides goods or services for DoD, DoN or non-DOD sources. During this time, MTFs received two common reimbursables: cash sale of meals and inpatient per diem charges. It is important to note that during the volume-based resource allocation model, CHAMPUS funds were held at the BUMED level. MTFs were not involved with CHAMPUS funds. If a CHAMPUS eligible dependent required care beyond the capacity of the MTF, the dependent was disengaged from the MTF.

d. The Model – Volume Based Model

Under this model, both in the civilian sector and the military, there are no incentives to be conservative. The driving factor is workload. In the civilian sector this methodology of reimbursement is referred to as fee-for-service. Fee-for-service is a

method of payment for services based on each visit or service rendered (HIAA, 1996).

Until early in the 20th century, civilian providers almost universally billed patients directly on a fee-for-services basis (MacLeod, 1995).

Within DoD, Services Medical Departments were traditionally funded based on historical resource consumption and workload trends. A problem with this approach is a built-in incentive to produce more output units, or more services, than may be medically necessary. This methodology provides no incentive for efficient use of resources. As a result, MTF Commanders were rewarded with larger budgets for generating more workload without being held accountable for the necessity of the workload generated (OASD (HA), 1994).

2. Present -- FY 1994 Through FY 1997 (Modified Capitation Allocation Resource Model)

During this phase, the concept of capitation was introduced to the DoD. Capitation is the key financing feature of the DoD's managed care model (TRICARE program) (OASD (HA), 1997). It is a method of payment for health services in which physicians or hospitals are paid a fixed amount for each enrollee regardless of the actual number or nature of services provided for each person (HIAA, 1996). In this section, an overview of and the components of modified capitation is presented.

a. *The Model -- The Modified Capitation Model*

The modified capitation model has been used through FY97 to allocate DHP funds to the three military medical departments and has served as the basis for budget allocations to the MTFs. It is referred to as the Modified MTF Based Capitation

Model because all resources attributed to a military department or MTF are used as the numerator and estimated user population is used as the denominator and is the surrogate for enrolled population. Health Affairs and the Services recognize that the modified capitation is not a true capitation model, thus, there is a need to refine and define the DoD managed care capitation model. Another factor, which was important in looking for a new methodology, is the transfer payment policy. The objective of this policy is to transfer payments between MTFs who are supporting other MTFs. This policy was never implemented but instead has been superseded by the new EBC model (OASD (HA), 1997).

Health Affairs separates budget resources into categories and subcategories to identify and protect the medical readiness mission, allow for the application of the appropriate population based cost drivers, and provide a means of assessing cost effectiveness of DoD health care with civilian resources (OASD (HA), 1993). The three distinct budget categories introduced under the modified capitation model are discussed below:

(1) Category 1. Military Medical Support (Non-capitated) includes all resources for Aeromedical Evacuation, Overseas Health Care, MEPCOM, Environmental Health, and Initial Outfitting Equipment. This category is not capitated. In FY 1997, Category 1 represented 11% of the budget allocation.

(2) Category 2. Military Unique Capitated and Education and Training represented 14% of FY 1997 budget allocation. It is capitated based on military active duty endstrength. It is composed of the following two subcategories:

(a) Category 2a is Military Unique Capitated.

Category 2a includes Readiness Planning and Exercises, Dental Care, Preventive Medicine and Occupational Health, Military Funded Emergency Leave, Veterinary Services, and Physiological Flights.

(b) Category 2b is Education and Training and Military Unique Capitated. It includes medical and technical school education and training for the Services medical department personnel.

(3) Category 3. Referred to as the HMO equivalent. It is capitated on estimated user population, and represented 75% of FY 1997 budget allocation. Category 3 is apportioned between the Direct Patient Care costs and non-capitated costs. The following is a list of Category 3 non-capitated costs:

- Lead Agents Operation Costs
- Management Headquarters
- Child Development Centers
- Clinical Investigation
- Minor Construction
- Maintenance and Repair
- Base Communications
- Base Operations
- Visual Information Systems
- Real Property Services

- Mission Specific Activities
- USTFs
- Direct Medical Education
- Moral Welfare and Recreation

b. Four Concepts Related to The Modified Capitation Model

Under the modified capitation model, four concepts were introduced: the establishment of the DHP appropriation; the modification of the CHAMPUS program into the TRICARE program with a triple option plan and the STS facilities; the creation of 12 Regional Lead Agents; and the implementation of the TRICARE MCS contracts to provide the civilian health care services within each Lead Agent regions. In this section each of the four components of the modified capitation model are discussed.

(1) **DHP:** In July 1993, the DHP's capitation policy was first established by the Acting Assistant Secretary of Defense for Health Affairs in a policy memorandum (OASD (HA), 1993). The Military Health Services System (currently referred to as the MHS is headed by the Assistant Secretary of Defense for Health Affairs. The DHP is a single appropriation to provide medical and dental care to all the armed forces and other eligible beneficiaries. Prior to the capitation financing, each Service was responsible for financing its own medical department. However, as a result of capitation, each Service's medical department surgeon general prepares a medical program budget for submission to Health Affairs, develops service specific programs, and operates the Services' MTFs. Each Service recruits and funds its own medical personnel

to administer the medical programs and provide health care services (OASD (HA), 1997).

The major difference is that each of the Service's Medical Departments no longer request funding from the DoD but instead from Health Affairs. As a result of the change, MTFs are given their normal DHP (formerly O&M, N) funding plus a MILPERS and CHAMPUS target. The DHP provides resources necessary to support the delivery of medical and dental services to eligible beneficiaries. It includes total operations and maintenance, CHAMPUS and MILPERS resources to the three Services.

(2) **TRICARE— Triple Option Plan:** The second component introduced under modified capitation is the modification of CHAMPUS into the DoD managed care model, the TRICARE program. The goal of TRICARE is to ensure that eligible military beneficiaries have access to stable, high-quality health care benefits and to improve the efficiency of the MHS. To accomplish those goals, DoD established a new approach to delivering and financing health care in the military on regional level that includes capitated budgeting and a triple option benefit package (CBO, 1994). The three options are TRICARE Prime, TRICARE Standard, and TRICARE Extra. Each of the options are explained below:

(a) *TRICARE Prime option is a plan modeled after private sector HMOs and is referred to as the HMO equivalent. This plan requires beneficiaries to enroll in the plan and agree to obtain all their care through a network of military and designed civilian providers. Active duty members are automatically enrolled and there is no annual enrollment fee for them and their families. TRICARE Prime enrollee have access to a Primary Care Manager (PCM) who is responsible for*

coordinating patient referrals for health care within integrated civilian and military provider network. This plan also offers a point-of-service (POS) option that permits enrollees to retain the freedom to choose their own provider. Non-active-duty enrollees pay an annual enrollment fee and a reduced CHAMPUS cost shares and co-payments (BUMED, 1995).

(b) TRICARE Standard option is the standard CHAMPUS program with a new name. Beneficiaries are not required to enroll and have greater choice in selecting their provider. In exchange for greater freedom, beneficiaries pay a greater annual deductible and more costly copayments. They can continue to receive care at MTFs on a space-available basis in order of priority (BUMED , 1995).

(c) TRICARE Extra option is referred to as the preferred provider plan organization(PPO). It has a higher deductible and copayment. It requires no enrollment and offers the following features:

- (i) Lower cost (five percent lower cost share after deductibles is met with lower negotiated network provider rates).*
- (ii) Less paperwork (no claim forms to file).*
- (iii) Choice (beneficiaries choose from a network of providers)*
- (iv) No balance billing (if using network providers) (BUMED, 1995)*

(d) STS: CHAMPUS recognizes the need to reduce cost where possible. As a result, CHAMPUS designates national or regional military or

civilian treatment facilities to provide certain highly specialized high-cost medical care to CHAMPUS beneficiaries. Health Affairs announces the specific types of care to be covered and the sites at which specialized care must be obtained. Medical facilities are designated as an STS based on its' record of readiness, access, quality, and cost. Lead Agents designates regional STS facilities as a component of the regional health plan (BUMED, 1995).

(3) **Lead Agents:** The third component added under the modified capitation methodology was the 12 Regional Lead Agents established in 1993 across the country. The Lead Agents are selected military medical centers within each region which are assigned to oversee the delivery of care within multiple (overlapping) catchment areas (OASD (HA), 1994). Lead Agents are responsible for developing a Regional Health Services (RHS) plan in conjunction with MTF Commanders of MTFs within the region. Each plan is expected to outline how the region intends to meet the goals of managed care, set up a civilian provider network and adopt utilization management (CBO, 1994). Lead Agents are not necessarily from the same Service affiliation as the MTFs within their region. The responsibility of the Lead Agents varies from region to region. Lead Agents do not change command and control between MTFs and their respective Service Medical Department chain-of-command. Consequently, respective Service Medical Departments retain individual MTF MILPERS and O&M Direct Care resources. Lead Agents do not control the flow of funds from the Services to the MTFs. However, Lead Agents are directly responsible for CHAMPUS funds, which are monitored by catchment area (CBO, 1994). In addition, Lead Agents play a special

role with regards to Managed Care Support Contracts (MCSCs) which is to provide input to contract proposal and include any region-specific requirements. In conclusion, Lead Agents are responsible for ensuring that MTFs within their region seek the most economical and efficient care.

(4) **Managed Care Support (MCS) Contracts:** The fourth component introduced under the modified capitation methodology was the MCS Contracts. The MCS Contracts are contracts negotiated centrally by the Office of the Civilian Health and Medical Program of the Uniformed Services (OCHAMPUS) for a five year period (one year plus four year option) to supplement the capabilities of regional military health care delivery networks within the Lead Agent regions.

The contracts are competitively bid, and are considered fixed-price, at-risk contracts. The contracts have two parts: administration and health care. The administrative part is fixed price; however the health care part is subject to adjustment based on risk-sharing provisions in which the contractor and the government share losses or gains beyond a certain level. Price adjustments may be based on factors such as inflation, beneficiary population change, and MTF workload shifts. The following clauses are unique to the MCSs:

(a) *Bid Price Adjustment (BPA) is incorporated into TRICARE contracts so that the government and the contractor can share the risk. At the time, when the contract were first negotiated the government could not provide the contractor with an absolute estimate of the total workload but could not exceed the amount appropriated by Congress or be in violation of the Anti-Deficiency Act.*

Therefore, contracts with some risk sharing were developed. It was assumed at the time the contracts were first negotiated that once the government and the contractor had one five-year TRICARE contract for each region under their belts that BPAs would be unnecessary or used for only minimal changes. The BPA provision of the TRICARE contract includes instructions on Resource Sharing and Resource Support (Desbrow, 1996).

(b) Resource Sharing is a primary feature in which the contractor provides resources to the MTFs to enhance the productivity of the direct care system by reducing the overall government costs for the MHS by ensuring the most efficient use of the direct care system (Desbrow, 1996).

(c) Resource Support is the secondary means of acquiring resources from the contractor. Resource Support represents "Task Order" requirements for the contractor to provide needed personnel, medical equipment and medical supplies to the MTF. The requesting MTF is responsible for funding the task orders. The Lead Agent works with the MTF Commander to determine its requirement (Desbrow, 1996).

3. The Future – FY 1998 and Beyond (Enrollment Based Capitation (EBC))

In this section the reasons for and the features of EBC are presented. In addition, the EBC Scorecards and the EBC Model are outlined. On 1 October 1997, the Health Affairs directed the MHS to implement the most advanced version of resource allocation methodology--EBC. Under this methodology, Health Affairs will track and score MTF

Commanders and Commanding Officers performance based on their MTF's EBC Scorecards scores (OASD (HA), 1997). To succeed under EBC, Health Affairs has identified specific issues toward which MTF Commanders should redirect their attention, energy, and vision. MTF Commanders need to understand and fully communicate the concept of operations under EBC with its new set of economic rules and incentives. Health Affairs has directed MTF Commanders to focus on the MTF's cost structure and the integrity of the methods used to calculate the costs of delivering health services. They are directed to work with their executive staff to develop a vision of the MTF's most appropriate menu of services and the right volume of services offered. MTF Commanders must manage the purchase of health care for MTF's Prime enrollees just as they manage supplemental health care dollars (OASD (HA), 1997).

a. Reasons for EBC

There are several reasons why Health Affairs continued to redefine and define the DoD managed care capitation model. One reason is that the modified capitation methodology is not a true form of capitation. Another reason is the problem with transfer payments between MTFs. The fundamental difference between the modified capitation and EBC is that EBC provides funding allocation to a specific MTF based on the TRICARE Prime enrolled population whereas the modified capitation model allocated funds to the MTF based on estimated user population (OASD (HA), 1997). It is Health Affairs intent that under EBC:

Commanders of MTFs are fully accountable for all the resources used by their TRICARE Prime population. They must provide all care regardless of the cost. It encourages commanders to provide care at the most cost-effective setting, to utilize preventive services, to effectively deliver each

episode of care, and to carefully monitor the volume of services provided. This methodology discourages inappropriate hospital admissions, excessive lengths of stay, and unnecessary services. Commanders are empowered by EBC to select high-quality, appropriate, cost-effective care (OASD (HA), 1997).

EBC is conceived to realign financing with the operational aspects of the TRICARE program. EBC is designed to motivate and reward MTF Commanders for maximizing their enrolled population. MTF Commanders' performance will be tracked and scored with the EBC Scorecards.

b. Features of EBC

There are essentially three primary features of EBC. The first is a per member, per month premium that will be earned by the MTF for each TRICARE PRIME patient enrolled. Next, additional revenues can be earned by the MTF for providing care to space-available patients if the MTF's capacity permits. Finally TRICARE PRIME care which is referred out by the MTF will be billed to the referring MTF. This model introduces several new concepts. One is the earning of revenue and another is the monthly reconciliation of the earnings of revenues and purchasing of care required by Health Affairs. As a result of the reconciliation there can be a transfer of DHP funds within and between the military departments (OASD (HA), 1997).

c. Financing Methodology

There is very little change in key players between the modified capitation model and the EBC, with the exception that the TRICARE Support Office (TSO) formerly OCHAMPUS will actually hold CHAMPUS dollars vice BUMED. The Lead Agents will continue to manage regional contracting initiatives. With the implementation

of EBC, MTFs are required to submit EBC Scorecards. The EBC Scorecard is a two-page report. The indices of the EBC Scorecard are discussed below:

(1) EBC Scorecard Page 1 (Revenues) consists of the following indices:

- (a) *TRICARE Prime enrollment*
- (b) *Space-A care sold to non-enrollees:*
 - (i) Other Prime enrollees referred in
 - (ii) MILPERS
- (c) *Care purchased for TRICARE prime enrollees*

(2) EBC Scorecard Page 2 (Resources Used/Expenses). OASD

(HA) is still working on Page 2, however, the projected indices for Page 2 are:

- (a) *Expenses*
 - (i) Direct O & M Obligation
 - (ii) Military Personnel
- (b) *Patient Reimbursables (TPC)*
- (c) *Resource Sharing (OASD (HA), 1997).*

d. The Model – EBC

The EBC model is very similar to the modified capitation model with the exception that EBC provides funding allocation to a specific MTF based on the TRICARE Prime enrolled population. On the other hand, the modified capitation model allocated funds to the MTF based on estimated user population (OASD (HA), 1997). The key to EBC is TRICARE Prime enrollees. As mentioned in the previous section, the

indices of EBC Scorecard Page 1 are TRICARE Prime enrollees; space-available care sold; and care purchased for TRICARE Prime enrollees. These indices have particular implications. In order to provide care, MTFs must ensure that they have adequate capacity. They must ensure that enrollment does not exceed capacity that will compromise quality. They must determine what services the MTF will provide and the services they will purchase. Therefore, capacity is a key factor to providing care to TRICARE Prime enrollees as well as the ability of the MTF to sell care to other non-enrollees. Capacity will also factor into the amount of care which the MTF must purchase in support of its' TRICARE Prime enrollees. Under the EBC model, Health Affairs emphasizes the importance of understanding the population served, reconciling the size of the projected enrollments, the capacity of the MTF, the quantity of Medicare and space-available care to be provided, and the expenses of operating the MTF, in order to provide those quantities of services (OASD (HA), 1997).

Funds will continue to flow from Health Affairs to the MTF via BUMED and the NHSO. However, it is important to note that under this new resource methodology, Health Affairs will have the ability to calculate an individual MTF's budget allocations, although the Services will continue to have the right to amend Health Affairs suggested budget allocation amounts per individual MTF. Indications are that this would be a duplication of efforts and would take away from the rationale behind implementing EBC, which is to eliminate waste wherever possible.

However, with revised financing under EBC, MTFs will receive direct O&M and CHAMPUS funds for their TRICARE PRIME enrollees. They will be

required to provide total care--in-house or supplemental health care. Supplemental care is the care that the MTF will be required to purchase from another MTF or a civilian contractor. This change in financing will require Comptrollers to implement a higher level of decision making and financial management skills to purchase the most cost-effective health care possible.

E. PERFORMANCE REPORTING

Managed care integrates the financing and delivery of appropriate health care services to covered individuals (McNamee, 1996). Managed care plan considers strategies that meet the needs of their members yet contain cost and ensure access. As a result, private sector MCOs and the MHS must rethink financial management functions. "Projections and management of health care expenditures on the delivery side are intertwined with projections used for pricing and budgeting (Thompson, 1996)." Monitoring performance is critical in a managed care environment. MCOs monitor their performance using Expense and Revenue (performance) reports to determine the profitability of the MCO. Likewise, the MHS has developed a similar report, the EBC Scorecard. In this section, performance reporting within MCOs and the MHS is discussed.

1. Private Sector MCOs Revenue/Expense Reports

a. Revenue

MCOs identify revenue from three primary sources: Capitation premium, coordination of benefits (COB), and investment income. Table 2.1 is a sample Revenue/Expense report.

Patient Categories	Revenues (000)	Expenses (000)	Margin (000)
Premium	350,000	300,000	50,000
Coordination of Benefits	3,000	2,900	100
Investment Income	2,225	2,100	125
Total	355,225	305,000	50,225

Source: Cleverly, W.O., Briefing Papers, "Financial Management in a Managed Care Environment," undated.

Table 2.1. Private Sector MCO Revenue and Expense Summary Report

Premium (capitation) is the main source of revenue for private sector MCOs. Changes in membership is projected based upon the number of new enrollees, shifts in plans during open season, renewal of membership, employee turnover, and shifts to other plans during open season. Membership is the first step in projecting the operating budget in an MCO (Thompson, 1996). Operating budget is the hallmark of where the financing and delivery of care comes together in an MCO (Thompson, 1996). Membership drives revenue. Members come from various groups/populations: Employee groups, Medicaid, Medicare, CHAMPUS, etc.

The second source of revenue is COB. It is frequently considered as revenue in an MCO. (This deviates from the traditional insurance company methodology

whereby COB is a contra or negative expense account.) COB is a method of integrating benefits payable from more than one health insurance plan so that the insured's benefits from all sources do not exceed allowable medical expenses or eliminate appropriate patient incentives to contain cost (HIAA, 1996).

The third source of revenue, investment income is derived based on projected investment returns. MCOs invest their prepaid premiums (capitated) into various investment which generate income.

b. Expenses

Expenses are usually categorized into three categories: medical, administrative and other. Medical expenses may be broken down by type of service, i.e., inpatient, outpatient, ancillary. Administrative expenses include sales marketing; management information system; claims, billing, services; utilization management; financing and underwriting; overhead; and provider relations. Premium taxes and commissions are classified as other expenses.

2. The MHS' Revenue/Expense Report - EBC Scorecard

The MHS has developed the EBC Scorecard to track and score the performance of MTF Commanders. The EBC Scorecard is a two-page report, Page 1 (Revenue) and Page 2 (Resources Used/Expenses). At this time, only Page 1 have been deployed to MTF for monthly reconciliation. Health Affairs expects to have Page 2 available for use in time for the full implementation of EBC, which is scheduled for FY 1999.

a. Revenue

MTFs will report their revenues on EBC Scorecard Page 1. Revenues consist of the following indices: 1) target/budgeted TRICARE Prime enrollment; 2) Space-A care provided to non-enrollees (Other Prime enrollees referred in and Medicare patients); and 3) Care purchased for that MTF's TRICARE Prime enrollees (OASD (HA), 1997). A sample of Page 1 is outlined in Table 2.2. TRICARE Prime enrollment is the foundation of EBC Scorecard (OASD (HA), 1997).

The EBC Scorecard (Page 1: Revenue)		
	Target	Actual
PMPM premiums earned	400,000	430,000
Care sold to others	<u>185,000</u>	<u>172,000</u>
Revenue Earned	585,000	602,000
Less Purchased care	<u>-100,000</u>	<u>-90,000</u>
Net Earnings	485,000	512,000

Source: Orr, D., Briefing Papers, "Enrollment Based Capitation: An Overview" undated.

Table 2.2. EBC Scorecard (Page 1: Revenue)

The difference between the actual revenues compared to the projected revenues are measured monthly. The primary reason for variance analysis is to identify where performance is different from expectations. This is where knowing the effects of cost drivers come into play. Cost drivers are those variables that can affect revenue and expenses. Cleverly (undated) list the following cost drivers: enrollment, utilization, efficiency, and patient mix. Enrollment is the number of members, utilization is the admission rate for inpatient care and visit rate for outpatient care, efficiency is the cost per discharge and the cost per visit, and the patient mix represents the population adjusted for age and sex for inpatient and outpatient care.

b. Expenses

MTFs will report expenses on EBC Scorecard Page 2 (Resources Used/Expenses). A sample of Page 2 is outlined in Table 2.3. OASD (HA) is still working on Page 2, however, the projected indices for Page 2 are: 1) Expenses incurred in support of the care provided (Direct O & M obligation and MILPERS); 2) TPC reimbursements; and 3) Resource Sharing (OASD (HA), 1997). The operating margin (6%) represents the net contribution as a percentage of net earnings and is used as a measure of efficiency with which the MTF is delivering care.

The EBC Scorecard (Page 2: Resources Used)		
Net Earned (from P. 1)	900,000	
Direct O&M Obl.	500,000	56%
Military Personnel	200,000	22%
Patient Reimbureables	50,000	6%
Resource Sharing	100,000	11%
Net Contribution	50,000	6%

Source: Orr, D., Briefing Papers, "Enrollment Based Capita-tion: An Overview" undated.

Table 2.3. EBC Scorecard (Page 2: Resources Used)

The results of operations on the EBC Scorecard are outlined on Page 2 as net contribution. Table 2.4 depicts this information in another format.

EBC Scorecard Reconciliation	
EBC Earnings	900,000
Resource Used	850,000
Differences	50,000
Operating Margin*	6%

• Operating Margin = Revenue in excess of expenses from operations divided by net operating revenue

Source: Form extracted from Chan, E., "Enrollment-Based Capitation," TRICARE Financial Management Education Program, undated/Figures from Table 2.2 and Table 2.3.

Table 2.4. EBC Scorecard Reconciliation

3. Comparison of The Private Sector MCO's Revenue/Expense Report And The MHS's Ebc Scorecard

a. Revenue

In this section, the revenue section of the private sector MCO's performance report is compared to the EBC Scorecard Page 1. Premium is listed on both reports and reflects the premium from capitated enrollees. The category care sold to others is a special category tracked by the MHS. There is no equivalent category on the private sector variance analysis. COB listed on the private sector report is similiar to the TPC category on the EBC Scorecard Page 2. COB is listed as a revenue as opposed to a contra or negative expense. TPC is listed as an expense on Page 2, expenses.

Investment Income is only applicable to private sector MCOs and is not listed on the EBC Scorecard. Another unique category that is listed on the EBC Scorecard but not on the MCO report is the purchased care category.

b. Expenses

Resource is the one unique difference between the private sector MCO report and the EBC Scorecard. Resource sharing can result in cost savings to MTF. It is a unique feature of the regional managed care contracts whereby the contractor provides resources to the MTFs to enhance the productivity of the direct care system by reducing the overall government costs for the MHS by ensuring the most efficient use of the direct care system (Desbrow, 1996).

F. SUMMARY

This chapter began with the history of health care cost in American and the MHS. As a result of escalating cost, private sector health care industry and the MHS began to look for other strategies to contain cost yet ensure access and quality, this introduced the concept of managed care. The implementation of managed care resulted in the introduction of a new financing model, capitation. The next section outlined the differences between fee-for-service and the capitation. The next section described the evolution of the MHS managed care and capitation financing models. It addressed the transition from a workload intensive, fee-for-service type resource allocation methodology to enrollment-based capitation (EBC). The final section, presented expense/revenue (performance) reports for MCOs and the EBC Scorecard for the MHS.

III. METHODOLOGY

A. INTRODUCTION

In this chapter the methodology used for this study is presented. This chapter is divided into two sections. Section one describes the structural components of the survey instrument which outlines the author's assumptions regarding the indices of the EBC Scorecard; strategies and initiatives available to improve performance on the EBC Scorecard; and skills and tools available to MTF Comptrollers. Section two describes the sample of MTFs asked to participate in the survey.

In the development of the survey questions, first the indices of the EBC Scorecard were identified. Next, the underlying drivers that could effect the indices were identified. Then, strategies and initiatives, skills and tools available to MTF Comptrollers to improve their performance under the EBC Scorecard indices were identified. Various assumptions are presented throughout the chapter concerning the links between the indices and the drivers and strategies, initiatives, skills and tools.

B. EBC SCORECARD INDICES

The primary indices of the EBC Scorecards are categorized as Revenue (Page 1) and Expenses (Page 2). The Revenue indices are target/budgeted TRICARE Prime enrollment; Space-A care provided to non-enrollees; and Care purchased for that MTF's TRICARE Prime enrollees. The Expenses indices are: Expenses incurred in support of the care provided; TPC reimbursements; and Resource Sharing (OASD (HA), 1997). In the next two sections drivers affecting the Revenue and Expense Indices are discussed,

along with strategies and initiatives to improve their performance and questions generated as a result of the underlying drivers.

1. EBC Scorecard - Revenue Indices

Under the EBC model, Health Affairs emphasize the importance of understanding the population served, reconciling the size of the projected enrollments, the capacity of the MTF, the quantity of Medicare and Space-A care to be provided, and the expenses of operating the MTF, in order to provide those quantities of services (OASD (HA), 1997). The premise/principle for EBC is population health. The key objective of a managed care plan is to optimize the health of a defined population (Kongstvedt, 1996). The defined population represents the people who use the delivery system as their source for care. Eligible beneficiaries who enroll at the MTF for care are the MTF's defined population; they are referred to as members or enrollees. In this section, the drivers that affect the Revenue Indices are discussed. The primary assumption is that the Revenue Indices are interrelated. The size of the enrolled population (Index 1) will necessarily affect the capacity and the utilization of the MTF, and hence the amount of service provided to non-enrollees (Index 2) and the amount of outside services purchased (Index 3). Thus variables effecting enrollment will also impact on the other indices. Therefore, the drivers discussed next under the enrollment index are also relevant to the other indices.

a. TRICARE Prime Enrollment

The key to EBC is TRICARE Prime enrollment (OASD (HA), 1997). The MTF will "earn" a per member per month (PMPM) premium for every TRICARE Prime enrollee with a PCM at the MTF. It is in the best interest of the MTF to increase

enrollees and to keep the enrollees satisfied with their services. Therefore, the author made the assumption that enrollment is the key driver of the Enrollment Revenue Index, as well as the other Scorecard indices. Based on that assumption, the author made certain assumptions regarding underlying variables, which could affect enrollment. The author identified seven variables: the capacity of the MTF; access to care; members' satisfaction; the health status of the members; quality of services; infrastructure of the MTF; and the availability of information. The rational for selecting these variables are discussed below.

(1) **Capacity**. The first variable is capacity of the MTF. Limited capacity may result in dissatisfied members, due to excessive waiting time for appointments. This could affect member enrollment. MTFs need to ensure that they have adequate capacity. They need to ensure that enrollment does not exceed capacity. If enrollment exceeds capacity this can compromise quality. MTFs determine what services the MTF will provide and the services they will purchase. Therefore, capacity is a key factor to providing care to TRICARE Prime enrollees as well as the ability of the MTF to sell care to other non-enrollees. Capacity will also factor into the amount of care which the MTF must purchase in support of its' TRICARE Prime enrollees.

(2) **Access to Care**. The second variable is access to care. Access to care is interrelated with capacity. Inadequate capacity will lead to limited access. MCOs are required by law to demonstrate their accessibility to their membership. Accessibility of care is determined by established standards based on customer service evaluations and members' surveys whereby members evaluate the waiting time for specific care provided such as emergency room (ER) visits, acute care, and routine visits.

In-service training for providers and MCO staff, and health education programs for enrollees also impact on access to care (Burke, 1996).

(3) **Member's Satisfaction.** The third variable is members' satisfaction. Members' satisfaction can affect acquisition of new enrollees and retention of enrollees. Members satisfied generated by the MTF is based on the level of access and the quality of services members receive. The number of members impacts on market share. Market share represents the size of defined population as a percentage of the total area population (Risky Business, 1995). In the case of MTFs, their market share is the total number of TRICARE Prime enrollees divided by the total number of eligible beneficiaries within the MTF's catchment area.

(4) **Health Status.** Health status of members is the fourth variable. Sicker members will require more care. The care required could be more costly, thus impacting upon resources. The objective of a managed care plan is to achieve the highest quality of care at the lowest price, to keep patients from getting sick and to identify those members who are in condition. "Condition in the population represent disease (i.e., diabetes, heart disease) and other circumstances for which people require more than routine care (Risky Business, 1995)."

(5) **Quality of Services.** The fifth variable is quality of the services provided by the MTF. This variable can effect enrollments. Poor care could result in decrease enrollments. MCOs use quality management to measure the extent to which providers conform to defined standards for health care delivery (McNamee, 1996). It may also involve measuring and analyzing the health outcomes of patients after

treatment and the health resources used to achieve those outcomes (HIAA, 1993). Basic elements of quality management include: standards for physicians' practice patterns; hospital criteria; formal mechanisms to identify substandard care and for intervention; health outcomes analysis; and formal grievance procedures (McNamee, 1996).

(6) **Infrastructure.** The sixth variable is the infrastructure of the MTF. The infrastructure includes the delivery system's processes, systems, equipment and facilities with which the MTF uses to operate. If the facilities are not in proper working condition, this will discourage eligible beneficiaries from re-enrolling. It will also discourage those space-available non-enrollees from enrolling.

(7) **Information.** The final variable is availability of information. Information is critical in implementing EBC (OASD (HA), 1997) and is critical in managed care plans (McNamee, 1996). Information systems include hardware, software, and the database that maintained by the MTF for clinical, financial, and operations management. "Organizations must continuously upgrade hardware capacity, software design and data collection methods to keep current and to be able to support the evolving needs of the organization (Risky Business, 1995)."

b. Space-Available Care to Non-Enrollees

This index monitors the amount of care provided to eligible beneficiaries, which are non-enrollees at that MTF. The MTF may "earn" revenues for that care after maximizing sustainable Prime enrollment. The MTF revenue earned is incremental. The author made two basic assumptions regarding this index. The first assumption is that the capacity of the MTF will determine the amount of extra care available that can be sold.

The second assumption is that those non-enrollees treated at the MTF are potential new enrollees and must receive the highest quality of care.

c. Care Purchased for MTF's TRICARE Prime Enrollees

This index tracks the amount of care purchased from another organization regardless of whether that organization is another MTF, the MCS contractor, or an external civilian provider. Capacity is seen as the important driver for this index. The MTF will purchase only the care that it can not provide in-house or the care which the MTF has determined to be more cost effective to purchase externally.

2. EBC Scorecard – Expense Indices

The Scorecard tracks three indices related to expenses: 1) Expenses incurred in support of care provided; 2) TPC (Patient reimbursement); and Resource Sharing. This section outlines each Expense index and discusses variables expected to impact on these indices. The most important of the three is the first: Expenses incurred in support of care provided, so a discussion of several specific cost drivers is incorporated with the discussion of that index.

a. Expenses Incurred in Support of The Care Provided

This index monitors the expenses incurred to provide care. Expenses are funded through DHP (formerly referred to O & M) Category 3 obligation and Military Personnel funding. The MHS distributes funds into three categories, Category 1 (Military Medical Support (Non-capitated)), Category 2 (Military Unique Capitated and Education and Training) and Category 3 (Direct Patient Care Cost). Category 3 is referred to as the HMO equivalent. It is capitated on estimated user population, and represented

75% of the FY 97 budget allocation. Category 3 is apportioned between Direct Care costs and non-capitated costs. The following is a list of Category 3 non-capitated cost: Lead Agent Operations Costs; Management Headquarters; Child Development Centers; Clinical Investigation; Minor Construction; Maintenance and Repair; Base Communications; Base Operations; Visual Information Systems; Real Property Services; Mission Specific Activities; USTFs; Direct Medical Education; and Moral Welfare and Recreation.

Expenses reported on the EBC Scorecard are based on information contained in the MEPRS. Historically, MEPRS has been inaccurate and has taken a low priority within the MTF. Under EBC, MEPRS and the accuracy of data entered into MEPRS will be critical. The author makes one assumption regarding this index, which is that MTF Comptrollers will make MEPRS a top priority.

Cleverly (undated) identifies three specific cost drivers that should influence expenses in a managed care setting. Each of these is discussed next.

(1) Utilization. Utilization management is the hallmark of a successful MCO (McNamee, 1996). Utilization management is used to monitor the quality, necessity, and appropriateness of medical interventions. One of the key tools used in utilization management is utilization review. "The most common utilization review features include pre-admission certification, concurrent review, discharge planning, case management, and outpatient certification (McNamee, 1996)." Most MCO contracts require providers to comply with the MCO's utilization management and quality assurance programs (Burke, 1996).

The primary variable which influences utilization is need per member. Need per member is the members demand for care. "To optimize health and/or business performance one must understand how to maintain a balance between need and delivery balance (Risky Business, 1995)." The need/delivery balance indicates the need for services (being expressed by defined population) relative to the MTF's ability to provide services to meet the enrollees need. Another index, which must be monitored, is the need/person/year, which indicates the general health status of the population. It represents the average level of need for healthcare services among members within the MTF's defined population. By keeping the need/person down the MTF will be able to sell more care to non-enrollees.

(2) **Efficiency**. Efficiency is cost per discharge or cost per visit (Cleverly, undated). McNamee (1996) defines efficiency as the ratio of output to inputs - lowest possible cost for a given level of production and quality. The key variables that affect this cost driver are staffing ratios, administrative productivity, and provider productivity. The author made the following assumptions regarding each of these variables:

(a) *Staffing Ratio: Inadequate staffing level could jeopardize retention of members. On the other hand, excess staff will cost extra dollars that could be spent elsewhere.*

(b) *Administrative Productivity: Available staff must be used to full potential but not overworked to cause "burnout." In the Risky Business*

Learning Lab simulation (1995), administrative productivity is referred to as Human Resource Utilization Percent, if the utilization rate is 100%, then people in the delivery system are fully occupied performing their functions- working “flat out” – and no slack exists in the system. However, for the Learning Lab, the utilization rate is set at 90%, which is considered the normal rate of staff efficiency.

(c) *Provider Productivity: It is critical that MCOs communicate with providers for the successful operation of the managed care network. “MCOs provide physicians with information about their own utilization patterns and cost-saving alternatives (McNamee, 1996).” By communicating with the physicians MCOs can gain insight on ways to reduce utilization, ideas for improving services to enrollees, and information on what others physicians are doing.*

(3) **Patient Mix.** The demographics of the defined population must be assessed. Cleverly (undated) defines this cost driver as the population adjusted for age and sex for inpatient and outpatient care. Health Affairs calculates a variable cost per capita rate for the user “equivalent lives” population in the EBC model. “The equivalent lives represents the adjusting of the population for such factors as age and sex (OASD (HA), 1997).” This provides the mechanism to account for the resource consumption of different populations based on their beneficiary category, military department, age, sex, and marital status (OASD (HA), 1997). For example, a female child age 2-11 is counted as 0.47 equivalent lives, while a married Navy female active duty age 18-44 is counted as 0.85 equivalent lives.

b. TPC (Patient Reimbursement)

This index will be used to offset the cost of care. It is an independent variable that is very difficult to project because not all eligible beneficiaries will have private health insurance. In fact, it is the author's assumption that this number will decrease over time, because the number of enrollees who will be willing to pay for extra health insurance will decrease. This is especially anticipated now that beneficiaries are guaranteed care at the MTF for free. There will be a few who will continue to carry third party health insurance only because it is a benefit of their job. Health Affairs projects a TPC target for each MTF.

c. Resource Sharing

The BPA provision of the TRICARE contract includes instructions on Resource Sharing and Resource Support (Desbrow, 1996). Resource Sharing is a primary feature in which the contractor provides resources to the MTFs to enhance the productivity of the direct care system by reducing the overall government costs for the MHS by ensuring the most efficient use of the direct care system (Desbrow, 1996). Under the EBC, Resource Sharing will be wholly owned by the MTF. Resource Sharing will enhance the MTF's capacity to deliver health care. This will enhance the MTF's capacity to earn extra revenue by: 1) increasing enrollment, and/or 2) expanding current space available to provide care (OASD (HA), 1997). The enlarged capacity could reduce expenses incurred for MTF's enrollees, at other MTFs, and from network providers.

3. Strategies to Improve EBC Scorecard Indices Performance

Based upon the author's assumptions, strategies and initiatives were identified which could effect the Indices. The strategies and initiatives identified to improve these indices are outlined in Table 3.1.

Strategies/Approaches	Initiatives to Improve Quality, Contain Cost and Ensure Access
▪ Members Satisfaction	<ul style="list-style-type: none">▪ Recent Visit Survey▪ Current Member Survey▪ Former Member Survey▪ Customized Employer Surveys▪ Surveys by Outside Organizations▪ Participating Provider Survey (HIAA, 1996).
▪ Market Research	<ul style="list-style-type: none">▪ Demographic Analysis of Membership▪ Identification of Provider Needs by Demographics▪ Competitive Analysis (HIAA, 1996)
▪ Utilization Management	<ul style="list-style-type: none">▪ Comprehensive Utilization Management major components: Case Management; Discharge/Disposition Planning; Utilization Review; Third Party Certification; Clinical Pathways; and Per-admission review (Varga, 1996).
▪ Demand Management	<ul style="list-style-type: none">▪ Nurse Advise Line▪ Self-care Programs▪ Shared Decision-Making Programs▪ Medical Informatics▪ Preventive Services & Health Risk Appraisals (Varga, 1996)
▪ Case Management	<ul style="list-style-type: none">▪ Manage the care of the 3%-5% of patient population who are high risk, critically injured, and suffering form chronic disease that consume the majority of the health care cost. TRICARE manage patients with the following diseases: Neoplasms, AIDS, Bone marrow, Head/Spinal Injury, Neonates and Burns (Varga, 1996).

Table 3.1. Strategies and Initiatives to Improve Quality, Contain Cost, and Ensure Access

Strategies/Approaches	Initiatives to Improve Quality, Contain Cost and Ensure Access
<ul style="list-style-type: none"> ▪ Disease Management 	<ul style="list-style-type: none"> ▪ Combine case management, critical pathways, and quality improvement aimed at optimal management of a patient with a specific single disease ▪ TRICARE managed diseases: Asthma, Congestive Heart Failure, Diabetes, AIDS, and Cancer (Varga, 1996).
<ul style="list-style-type: none"> ▪ Changing Provider Behavior 	<ul style="list-style-type: none"> ▪ Credentialing/Recredentialing ▪ Physician Education ▪ Physician Profiling (data and feedback – positive and negative) ▪ Practice Guidelines/Clinical Protocol ▪ Rewards ▪ Discipline and Sanctions ▪ Quality Assurance ▪ Provider/Member Grievances (HIAA, 1996).
<ul style="list-style-type: none"> ▪ Critical Pathways 	<ul style="list-style-type: none"> ▪ Clinical Pathways ▪ CareMaps ▪ Clinical Guidelines ▪ Practices Guidelines ▪ Clinical Protocols ▪ Algorithms (Varga, 1996)
<ul style="list-style-type: none"> ▪ Alternatives to Acute Care Hospitalization 	<ul style="list-style-type: none"> ▪ Subacute Care facilities ▪ Step-down units ▪ Outpatient Procedure units ▪ Hospices ▪ Home Health Care(Varga, 1996)
<ul style="list-style-type: none"> ▪ Subacute Care 	<ul style="list-style-type: none"> ▪ Transitional subacute care (5-30days/5.5-6.5 hours nursing) ▪ General subacute care (rehab, wound care, IV therapy – 10-40 days/3.5 – 5 hours nursing) ▪ Chronic subacute care (ventilator, comatose, and progressive neurological) ▪ Long-term Transitional subacute care (more intense than Transitional Subacute Care) ▪ Medically complex patients ▪ Respiratory care ▪ Recuperating surgery patients ▪ Rehabilitation ▪ Neurological recovery

Table 3.1. (Continued)

Strategies/Approaches	Initiatives to Improve Quality, Contain Cost and Ensure Access
▪ Subacute Care (Continued)	<ul style="list-style-type: none"> ▪ Cardiovascular ▪ Oncology ▪ IV therapy ▪ Wound Management (Kongstvedt, 1996)
▪ Ancillary/ER Services	<ul style="list-style-type: none"> ▪ Ancillary Services – Control physician behavior ▪ ER – Nurse Advise Lines, prior approval from PCM, Self-Referral, Alternatives to ER, Contracting, Hidden Costs, and Out-of-Area Emergencies (Varga, 1996).
▪ Mental Health & Substance Abuse	<ul style="list-style-type: none"> ▪ Top cost area for Champus, highest percentage savings under Managed Care, Increasing requirements over time (Varga, 1996).
▪ Pharmacy Services	<ul style="list-style-type: none"> ▪ First, determine the cost of pharmacy benefit (benefit design, claims adjudication, enrollment information/eligibility verification, and electronic claims adjudication). ▪ Second, reduce ingredient cost, decrease dispensing fees, increase copays and decrease the number of prescriptions (Kongstvedt, 1996). ▪ TRICARE top 10 drugs: Premarin, Zantac, Amoxil, Synthroid, Lanoxin, Procardia, Vasotec, Trimox, Cardiazem, and Prozac (Varga, 1996).
▪ Quality Management	<ul style="list-style-type: none"> ▪ Quality Assurance ▪ Quality Assessment ▪ Quality Improvement ▪ Deming, Juran, Crosby, Doneedian (Varga, 1996). ▪ Standards for physician credentialing and recredentialing; assessment of physicians' practices patterns; hospital criteria; formal mechanisms to identify substandard care and for interventions; health outcomes analysis; and formal grievance procedures (HIAA, 1996).

Table 3.1 (Continued)

Strategies/Approaches	Initiatives to Improve Quality, Contain Cost and Ensure Access
<ul style="list-style-type: none"> ▪ Use of data & reports 	<ul style="list-style-type: none"> ▪ Routine reports ▪ Ad Hoc reports ▪ Provider Profiling (adjusted for severity and case mix; adjusted for peer group; complaints, transfer rates, and administrative problems; and budget/cost information) ▪ Outliers – Statistical control (Varga, 1996). ▪ Productivity Improvements (Braendel, 1997). ▪ Cost/Benefit Analysis (Braendel, 1997).

Table 3.1 (Continued)

Based on the strategies and initiatives outlines in Table 3.1 a set of survey questions were developed to address indices. These were questions 1, 2, 3, 4, 6, 7, 8, 9, 11, 20, 21, 22, and 25. Survey questions are listed in Appendix A.

C. SKILLS AND TOOLS AVAILABLE TO MTF COMPTROLLERS

Based on information obtained from the literature review and discussions with key health managers, the author made assumptions regarding skills and tools in which MTF Comptrollers should be using to function under EBC. Some of those assumptions were drawn from two Learning Lab simulations in which the author participated. The Learning Lab simulation tools used were *Ricky Business: Mastering the New Business of Health* by Healthcare Forum and *Mastering the Transition to Capitation* by Healthcare Forum. The survey questions were developed to assess MTF Comptrollers understanding and use of these skills.

1. Skills

Managers in the private sector MCOs must continue to use basic management skills, such as leadership, management, and communication to improve their performance in a managed care environment. However, they also must employ other skills such as system thinking and change management to give them a "winning edge." This section discusses Systems Thinking and Change management. These two skills motivated questions 12, 13, 15, 16, 17, 18, 23, 26, 27, and 31 on the survey.

a. *Systems Thinking*

The paradigm of system thinking is to gain an "appreciation of how the interaction of a collection of parts influences the common purpose (Mastering, Undated)." Merriam Webster defines a system as an arrangement of units that function together. The key characteristics of systems thinking are: dynamic complexity; interdependence; and delay (time during transition (Mastering, undated)).

Systems Thinking answers the question: "What are the relationships that generate performance (High Performance Systems Inc., undated)." Making the transition from the old fee-for-service to a capitated model will require a subtle blend of well-timed and coordinated strategies in order to survive in the old while transitioning to the new. Four strategies are suggested to create a successful environment during this transition:

- (1) Create shared understanding among members; (2) think systemically about a complex environment; (3) become a dedicated learning organization; and (4) question basic mental models- rethinking the paradigm of what it means to deliver healthcare. The Learning Lab is designed specifically to help healthcare organizations do all four (Hirsch and Kemeny, 1994).

In other words, managers can no longer look at just their little piece but must also consider the impact on the whole system, if the system is to survive. System Thinking is a skill for seeing the whole system.

b. *Change Management*

Change Management involves the ability to recognize change and its' consequences, to plan change effectively and to manage change and its' consequences (Beckhard, 1987). The aspects of change management is described as: Setting goals and designing a desired future state; Diagnosing the present condition in relation to future goals; Defining the transition state and activities required to meet the future state; Developing strategies and action plans for managing the transition (Beckhard, 1987).

As the health care industry undergoes a major structural change from fee-for-service to capitation, old rules no longer work and new rules must be developed and used (Horowitz, 1996). The two rules for change are capacity to change and readiness to change.

2. Tools

There are several tools available to resource managers that may prove beneficial in the adapting to EBC. Some of them are a) ORYX, b) HEDIS, c) HEAR, d) severity adjustment, e) CEIS, and f) BUMED's SMART. Features of each of the tools are presented in this section. Survey questions 14, 24, 28, 29, and 30 were developed to obtain information on the use of these tools. These questions are presented in Appendix A.

a. ORYX

As of January 1987, the Joint Commission's Board of Commissioners of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) approved the plan and timetable for integrating the use of outcomes and other performance measures into the accreditation process (JCAHO webpage, 1998). The Board named the milestone initiative ORYX: The Next Evolution in Accreditation. ORYX is intended to give accredited organizations objectively, quantifiable information about their performance, which they can use externally to demonstrate accountability. ORYX will be phased-in over time in three steps and will initially apply only to hospitals and long-term care organizations. The first step, by March 2, 1998, each accredited hospital and long term care organization must select one or more performance measurement systems accepted by the Board. There are currently 211 such systems, of which 163 contain clinical measure relevant to hospitals and 72 measures relevant to long term care organizations. The second step, and also by March 2, 1998, accredited hospitals and long term care organizations must select from its performance measurement system(s) at least two clinical measures that relate to at least 20 percent of it's patient population. The final step, each accredited hospital and long term care organization will be required to submit data, through their selected measurement system(s), to the JCAHO relative to its selected measures no later than the first quarter of 1999 (JCAHO webpage, 1998).

b. HEDIS (NCQA Healthplan Employer Data and Information Set)

The HEDIS outlines a core set of performance measures for evaluation of managed care plans. It was developed by the National Committee for Quality Assurance

(NCQA), a voluntary health plan accreditation program which develops performance measures. Accreditation is based on six categories of standards: Quality Management and Improvement (35%); Members Rights and Responsibilities (10%); Physicians Qualifications and Evaluation (25%); Preventive Health Services (10%); Utilization Management (10%); and Medical Records (10%). The latest version of HEDIS 3.0 has 75 performance measures in eight areas: effectiveness of care; access to/availability of care; satisfaction with experience of care; health plan stability; use of services; cost of care; informed health care choices; and health plan descriptive information. The HEDIS 3.0 Member Satisfaction Survey (revised from the annual Member Health Care Survey) is designed to provide health plan members and purchasers with information to support their decisions about health selection. By using this standardized measurement tool, members and purchasers can direct comparisons between plan performance data (National Research Corruption (NRC) webPages, 1998).

c. *HEAR (Health Enrollment Assessment Review)*

The MHS uses HEAR to assess the health status of its' TRICARE Prime enrolled population. HEAR is a self reported assessment tool for adults (17 years and older) who are enrolling into TRICARE Prime. The report is designed and managed by the Office for Prevention and Health Services Assessment to provide information regarding: An individual's *health risk factors and preventive care needs*; Which individuals are likely to use *high levels of medical resources*; The appropriate *training and expertise level* required for effective health care management of an individual; and Risk factors, demographics, care levels, utilization for use in *strategic planning for*

population health management and resource utilization at the Regional, Major Command (MAJCOM), or MTF level (OPHSA webpage, 1998).

The survey questionnaire provides data on: Demographics, Physical activity, Men's health, Cholesterol, Alcohol, Mental health, Activity limitations, Life satisfaction/ family conflict, Blood pressure, Women's pressure, Smoking, Preventive issues, Stress, Absenteeism, Medical care, Chronic conditions. Data is entered into HEAR by scanning. Algorithms are run against the data and reports are generated for various users.

d. Severity Adjustment Algorithms

Severity adjustment is method of measuring variations in physician practice patterns. Cost-savings are realized by reducing variations in physicians practices patterns. Severity adjustment presents hospitals and physicians specific profiles of clinical processes and outcomes. These processes and outcomes tool can help providers monitor and enhance their clinical quality outcomes and cost efficiencies. There are eight to ten civilian companies which have developed various severity adjustment tools, for instance, 3M, MECON and IAMETER.

e. CEIS (Clinical Executive Information System)

Health Affairs developed the CEIS for MHS' MTFs. CEIS is the critical system for the implementation of EBC within the MHS. CEIS is an integrated database (IDB), which will pull together MEPRS price lists, Defense Enrollment Eligibility Reporting System (DEERS), CHCS, and Ambulatory Data System (ADS). It will generate the EBC reports. CEIS will make available reports tailored to the MTFs, Lead

Agents, Health Services Operations (HSOs), Regional Medical Commands (RMCs), MAJCOMs, and Services.

f. BUMED's SMART (*Summarized Medical Analysis Resource Tool*)

The BUMED's SMART is a tool developed by NCTSW for Navy's MTFs. It is designed to track, evaluate, and analyze financial information. SMART consolidated three pre-existing applications into a single interface. The three systems were Three-years Obligations and Planning System (TOPS), Annual Work and Resource Evaluation (AWARE (FUTURE)), and Redistributed Uniform Management Report (RUMR). TOPS tracks executions against planned obligations. AWARE is used to track workload. RUMR assembles data from the STARS accounting report in a user-friendly environment and provides search tools for reviewing information at various levels of detail. SMART has advanced data retrieval and trending capabilities, which will significantly enhance the study of business practices and peer group comparisons. It can perform "what if" analysis and allows examination of infrastructure costs at levels previously unavailable.

3. Summary of the Survey Instrument

Table 3.2 summarizes the EBC Scorecard Indices, Skills and Tools used by MTF Comptrollers linked to questions on the survey instrument.

EBC Scorecard Indices, Skills and Tools used by MTF Comptrollers	Survey Question
EBC Scorecard Indices	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 19, 21, 22, 25
Skills	12, 13, 15, 16, 17, 18, 23, 26, 27, 31)
Tools	14,24,28,29, 30

Table 3.2. EBC Indices Linked to Survey Questions

D. PARTICIPANTS

The author selected the largest number of MTF facilities that had similar capacity for services, the medium-sized MTFs. Medium-sized MTFs were selected based on their similarity in size and mission and capability to provide a broad range of care. Based on discussion with BUMED staff (Pellack, 1998), the following MTFs are considered similar in size and mission and were asked to participate in the survey: NH Bremerton, Washington; NH Camp Lejeune, North Carolina; NH Jacksonville, Florida; NH Pendleton, California and NH Pensacola, Florida. Comptrollers from these five medium-size Navy MTFs were asked to participate in this study.

The participants were requested to identify terminology on the survey that they did not understand. This was done to assess whether or not they were aware of the latest resource management information. Participants were also requested to provide their telephone and fax numbers to facilitate follow-up. The survey was conducted via e-mail with a follow-up telephone call to each of the respondents to clarify answers to the

questions. The following demographic information was obtained: gender, grade, years of service, and years of experience as a comptroller.

IV. SURVEY RESULTS

A. INTRODUCTION

In this chapter the results of the survey for MTF Comptrollers are presented. Of the five MTFs Comptrollers asked to participate in this survey four responded (80 percent). Because of confidentiality, the names of the MTFs are not used but instead they are referred to as MTF A, MTF B, MTF C, and MTF D. The sections are presented organized in terms of the three groups of questions on the survey: the EBC Scorecard, tools and skills available to MTF Comptrollers. Under each section, the survey question and their respective results are presented. In the first section of this chapter the demographics of respondents are presented.

B. DEMOGRAPHICS OF RESPONDENTS

All of the respondents have served as Comptrollers or Deputy Comptrollers for an average of 16 years. Table 4.1 outlines the demographics of the respondents. The respondents' ages ranged from 40 to 55 with a mean age of 48 years. The respondents were a mix of military and civilians, with 50% military and the other 50% senior civilians. The rank of the military was Lieutenant Commander (LCDR) (0- 4) and above while the civilians were General Schedule 12 (GS-12) and above. There was a fifty-fifty split between male and female.

MTF	Military Rank/Civilian GS Grade	Male/ Female	Years as a Comptroller
A	LCDR	M	15
B	LCDR	F	16
C	GS-14	F	16
D	GS-12	M	17

Table 4.1. Demographics of Respondents

C. EBC SCORECARD

The survey questions (Q) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 19, 20, 21, 22, and 25 were motivated by the analysis of the EBC Scorecard indices, presented in the previous chapter. The MTFs' responses are outlined below:

1. **Q1.² Did you ensure that the health of your enrolled user population was assessed? (Yes/No)³**

MTFs A, B, and C answered positively to this question. MTF B also indicated that the managed care contractor performs this function. MTF D did not answer the question but referred it to the Managed Care Directorate (MCD).

2. **Q2. If you answered yes to Q1, how was the health of the enrolled population assessed? (a) HEAR, (b) HEDIS, (c) claims-based assessment, (d) Other. (Yes/No)**

MTFs A, B, and C listed the HEAR survey. MTF B also annotated the HEDIS and that the managed care contractor is performing this function. MTF D did not answer the question but indicated that this was a function of the MCD.

3. **Q3. Who interpreted your survey? (a) Epidemiology (in-house or contractor), (b) You or your staff, (c) The Managed Care Department, (d) Other. (Yes/No).**

MTF A responded positively to this question and commented that they were in the process of hiring an epidemiologist. MTFs B and C responded positive and indicated that

² The number of the survey question will precede the question and will be annotated by Q and the number of the survey question, i.e., question 5 on the survey is Q5.

³ Answers to survey questions are listed in abbreviated form, please refer to Appendix A for the complete survey.

they are using their regional managed care contractors. MTF D did not answer the question but referred to the MCD.

4. **Q4. When is the next assessment survey scheduled? (a) No survey scheduled, (b) Recently (within the past 3 months) completed a survey, no survey scheduled, (c) Survey schedule to be conducted within the next 6 months, (d) Survey schedule to be conducted within the next 12 months. (Yes/No)**

MTF A indicated that the next survey will be conducted within the next 12 months. MTF B indicated that the next survey will be conducted within the next 6 months. MTF C indicated that their surveying is ongoing. MTF D did not answer the question but referred it to the MCD.

5. **Q5. Did you participate in determining the MTFs maximum capacity? (Yes/No)**

MTFs A and B answered no to this question. Both indicated that the MCD performed this function. MTFs B and C indicated yes.

6. **Q6. Do you feel that it is your responsibility to ensure that the following initiatives are implemented? (a) Disease management, (b) Staffing efficiency, (c) Aggressive marketing, (d) Resource sharing, (e) Other. (Yes/No)**

MTF A answered positively to part (d), resource sharing but negatively to parts (a), (b), and (c) without explanation on who is performing the function. MTF B answered positively to parts (b), staffing efficiency and (d), resource sharing but negatively to parts (a) and (c). MTF B indicated that part (a), disease management is a function of MCD, part (b), staffing efficiency is a function of Efficiency Review, and part (c), marketing is the responsibility of MCD. MTF C responded negatively to part (a), disease management but positively to parts (b), (c), and (d) without explanation. MTF D

did not answer the question but referred the question to the MCD. Answers summarized in Table 4.2.

	(a) Disease Management	(b) Staffing Efficiency	(c) Marketing	(d) Resource Sharing	(e) Other
MTF A	No	No	No	Yes	
MTF B	No	Yes	No	Yes	
MTF C		Yes	Yes	Yes	
MTF D					

Table 4.2. Summary of Answers to Q6

7. Q7. Do you feel that it is your responsibility to ensure that the following programs are implemented to reduce patient demand? (a) Telephone-based decision support, (b) Computer-based decision support, (c) Self-care pamphlets, (d) Health promotion programs, (e) Passive media tools, (f) Other. (Yes/No)

MTF A replied negatively to all parts. MTF B answered negatively to all parts but did indicate who is responsible for performing the function: part (a), telephone-based decision support and part (b), self-care pamphlets is a function of the regional managed care contractor, part (c), self-management and part (e), computer-based decision support is a function of Patient Education Department; part (d), health promotion programs is a function of Health Promotion Department; part (f), passive-media tools is a responsibility of various departments; and part (g), patient demand reduction is a responsibility of inpatient and outpatient Utilization Management Department. MTF C indicated positively to all parts. MTF D did not answer but referred the question to the MCD.

Table 4.3 summarizes the answers to this question.

	(a) Telephone-based decision support	(b) Self-care pamphlets	(c) Self-manage- ment	(d) Health promotion programs	(e) Computer-based decision support	(f) Passive-media tools	(g) Other programs
MTF A	No	No	No	No	No	No	
MTF B	No	No	No	No	No	No	
MTF C	Yes	Yes	Yes	Yes	Yes	Yes	
MTF D							

Table 4.3. Summary of Answers to Q7

- 8. Q8. Have you analyzed which medical and administrative services should be offered in-house and which ones should be outsourced? (Yes/No).**

MTF A replied negatively. MTFs B and C replied positively. MTF B also indicated that this is an ongoing process with MCD and is approved at the Executive Steering Committee/Counsel (ESC) level. MTF C answered positively. MTF D did not answer the question but referred it to the MCD.

- 9. Q9. If you answered no to Q8, who determines which services are offered in-house or outsourced? (a) The Managed Care Department, (b) The Patient Administration Department, (c) The Medical Staff, (d) Other. (Yes/No).**

MTF A answered yes to all parts and indicated that services are determined by the MCD, Patient Administration Department, and the Director, Medical Staff. MTF B listed the ESC. MTF C did not answer the question. MTF D did not answer the question but referred the question to the MCD.

- 10. Q10. What efforts have you ensured were taken over the past year to market the MTF to PRIME user population (above and beyond status quo required improvements and equipment purchases)? (a) Budgeted for/purchased infrastructure improvements, (b) Budgeted for/purchased equipment for clinical areas, (c) Budgeted for/purchased/outsourced technology (i.e., MRI, CAT scan, computers, information systems, and etc.), (d) Other. (Yes/No).**

MTFs A and D answered no to all parts of this question. MTFs B and C answered yes to all parts of this question. Under part (a), MTF B wrote "inpatient rooms beautification project/CA of housekeeping to improve level of service and patient satisfaction;" part (b), "Optifill system to reduce prescription waiting time;" part (c), "Command homepage;" and part (d), "Contracted central appointments and referral services, which has proven to be a great satisfier."

- 11. Q11. What cost containment programs have you recommended for implementation aimed at incentivizing providers? (a) Risk Pool whereby revenue-generating providers are given a portion of the revenue, (b) Other (Yes/No).**

MTF A replied negatively. MTF B replied positively and wrote,

Cost containment is aimed at the department level. Currently, working on ad hoc reports from CHCS to show productivity at the provider level. Such data recently used to convince DSS (Director, Surgical Services) that present OB/GYN workload could be maintained without continuing contract providers. Saved \$175k/year.

MTF B also indicated that a percentage of the TPC is returned to the clinic based on productivity. MTF C replied negatively. MTF D plans to implement a program later when EBC is on-line.

- 12. Q19. Are you taking steps to ensure that the satisfaction of your PRIME enrollees is assessed annually? Yes/No. If yes, how is it assessed? (a) HEDIS, (b) HEAR, (c) Other. (Yes/No).**

MTFs A and D answered no but indicated that the MCD was performing this function. MTFs B and C answered yes. MTF B did not list the name of the survey used but did indicate that they are using DoD and MTF surveys. MTF D indicated that they were also using HEDIS.

- 13. Q20. What percentage of your FY96, FY97, and FY98 APF did you obligate/budget to be spent in the following areas? Marketing, Smoking Cessation, Alcohol Abuse, Childhood Immunization, Health Promotion, Other Risky Behavior (Specify).**

All of the MTF indicated that they have spent less than 1% of their total New Obligational Authority for all of these programs. MTF B indicated that they have added "additional staff and funding in these areas the past two years, but still comes to less than 1%" of their budget.

- 14. Q21. What are you doing to reduce purchased care cost? (a) Implemented resource-sharing agreements, (b) Negotiated supplemental care arrangement, (c) Work closer with consortium MTFs, (d) Other (Yes/No).**

MTF A replied positively to part (a), resource sharing and negatively to part (b), supplemental care arrangements and part (c), work closer with consortium MTFs. MTFs B and C replied positively to all parts. MTF D did not answer but referred the question to the MCD. Table 4.4 summarizes the answers to this question.

	(a) Implemented Resource-sharing agreement	(b) Negotiated supplemental care arrange- ment	(c) Work closer with consortium MTFs	(d) Other
MTF A	Yes	No	No	
MTF B	Yes	Yes	Yes	
MTF C	Yes	Yes	Yes	
MTF D				

Table 4.4. Summary of Answers to Q21

- 15. Q22. When there are variances between budgeted purchased care cost and actual cost, what do you do? (a) Discuss variance with specific referring provider, (b) Discuss variance with Managed Care Department, (c) Other (Yes/No).**

MTF A replied negatively to all parts. MTFs B and C replied positive to all parts.

MTF D did not reply but referred the question to the MCD.

- 16. Q25. Have you supported the implementation of hospital protocol for the five major prevalent diseases, which can impact on inpatient care? (Diseases listed on the survey were diabetes, hypertension, asthma, heart disease, and births). (Yes/No).**

MTF A did not answer the question. MTF B answered negatively to all parts.

MTF C replied positively to all parts. MTF D did not answer the question but referred the question to the MCD.

D. SKILLS

The survey questions 12, 13, 15, 16, 17, 18, 23, 26, 27, and 31 were motivated by the analysis of new skills MTF Comptrollers may need to develop, as outlined in the previous chapter.

- 1. Q12. In addition to your role as a Comptroller, what are some of your other roles as a result of implementation of EBC? (a) Planner, (b) Change agent, (c) Other. (Yes/No)**

MTFs A and B replied negatively. MTF B also indicated that "EBC has no impact on my job." MTF C answered positively. MTF D replied no to part (a), planner but positive to part (b), change agent and listed information manager/designer.

- 2. Q13. Which of the following skills are you using as a result of EBC? (a) Change Management, (b) Management Audits, (c) System Thinking, (d) Other. (Yes/No)**

MTFs A and B replied negatively. MTF B also stated that "EBC has no impact on my skill level" MTFs C and D answered positively.

- 3. Q15. How often do you discuss the MTFs performance on the EBC Scorecards with the following: Commanding Officer (C/O), Executive Officer (X/O), Director for Administration (DFA), Director for Surgical Services (DSS), Director for Nursing Services (DNS), Director for Medical Services (DMS), Director for Ancillary Services (DAS), Department Heads (DHs) (i.e., Pharmacy, Lab, X-ray), Individual providers, Individual nurses (i.e., OR nurse), Other (Options for each broken-down by Weekly, Monthly, Other, and Never).**

MTF A reports monthly to the C/O, X/O, and Directors but never to DHs, individual providers and nurses. MTF B replied negatively due to problems with the system. MTF C reports weekly to the C/O, X/O, and the Directors and monthly to the individual providers and nurses. MTF D indicated that when EBC is in place, reports will be given to the ESC at least monthly.

4. Q16. Have you taken steps to ensure that providers and MTF staff personnel are aware of the EBC Scorecard criteria? (Yes/No)

MTF A replied positively and indicated that MTF staff personnel are made aware of the EBC Scorecard criteria via their directors. MTF B answered positively and indicated that the concept behind EBC was reported and the need to be aware of the change. MTF C replied positively. MTF D indicated that this will be done in the future.

5. Q17. Are you taking steps to ensure that providers and MTF staff personnel are trained on the EBC Scorecard and its' impact on resources? (Yes/No)

MTF A replied positively and indicated that MTF staff personnel are made aware of the EBC Scorecard criteria via their directors. MTF B indicated no and stated that there is no impact. MTF C answered positively. MTF D indicated that this will be done in the future.

6. Q18. Are you taking steps to ensure that providers have access to information systems for decision-making? (Yes/No)

MTF A replied negatively and indicated that this is their directors' responsibility. MTF B answered yes that the providers have access but also stated that the systems are worthless. MTFs C and D answered positively.

7. Q23. As a cost containment effort, have you reduced your civilian hiring? (Yes/No)

MTFs A, B and C replied negatively. MTF D did not answer this question but referred it to the MCD.

- 8. Q26. Are you involved with correcting problems with the following information systems? (Please indicate which of the functions fall under your control) MEPRS, CHCS, ADS, DEERS, Other. (Yes/No)**

MTFs A and C answered yes to MEPRS and no to the other information systems, CHCS, ADS, and DEERS. MTF B listed yes to all of the systems. MTF D did not answer this question but referred it to the MCD.

- 9. Q27. Are you a member of any clinical committees/PAT teams (i.e., Pharmacy and Therapeutic Committee)? (Yes/No)**

MTFs A and B replied negatively. MTF B did list membership in other clinical type committees. MTF C answered yes. MTF D did not answer this question but referred it to the MCD.

- 10. Q31. Have you recommended that your MTF Strategic Plan include the six EBC Scorecard criteria/indices? (Yes/No)**

MTFs A and B replied negatively. MTF C answered yes. MTF D did not answer this question but referred it to the MCD.

E. TOOLS

Questions 14, 24, 28, 29, and 30 addressed tools that comptroller can use to improve their performance.

- 1. Q14. What information system do you use to forecast (1) Enrollment, (2) Capacity, (3) Utilization, (4) Expenses, (5) Severity of inpatient and outpatient workload and (6) TPC? Use numbers 1 through 6 to indicate which system is used for each forecast type. (Information systems listed: BUMED's SMART, CEIS, 3M Risk Assessment, Other).**

MTF A indicated that BUMED's SMART is used to perform numbers 1 through 6. MTF B indicated that none of the systems are used but instead wrote, " We do not

need new systems, we need to fix what we have. ADS is too labor intensive, SPMS/MEPRS is broken, data in CEIS & EBC is worthless, SMART/UMR does not allow input/tracking of reimbursable so is not a practical tool for the field comptroller."

MTF C indicated that BUMED's SMART is used for 1 and CEIS is used for 1, 2, 3, and

5. MTF D listed BUMED's SMART is used for 5 and 6 and uses CEIS for 5.

2. Q24. Have you recommended the implementation of the most efficient organization (MEO) where possible to contain cost? (Yes/No)

MTFs A and B answered yes. MTF C replied negatively. MTF D did not answer this question but referred it to the MCD.

3. Q28. Are you ensuring that the cost, quality, and variation of network providers are monitored with IAMETER or some other software? YES/NO (Please indicate the name of the software being used to perform this function).

MTFs A, B and C replied negatively. MTF D did not answer this question but referred it to the MCD.

4. Q29. Are you involved with risk adjustment analysis? (Yes/No)

MTFs A, B and C replied negatively. MTF D did not answer this question but referred it to the MCD.

5. Q30. Are you ensuring that physician profiling on in-house physicians is conducted and that variations in practice patterns for the same severity and DRG are addressed? (Yes/No)

MTFs A, B and C replied negatively. MTF D did not answer this question but referred it to the MCD.

F. SUMMARY

In this chapter, the demographics of the four MTFs Comptrollers who were asked to participate in this study was presented along with their responses to the survey questions. In Chapter V, the answers to these questions will be used to answer the primary research question and the subsidiary research questions of this study.

V. SUMMARY AND CONCLUSIONS

A. SUMMARY

This study examined initiatives implemented by private sector MCOs and the MHS that MTF comptrollers can adopt to improve their MTF's performance under the indices of EBC Scorecard. The objective of this study was to present a baseline assessment, describing skills, roles, and tools that MTF Comptrollers could adopt to improve their score on the EBC Scorecard. This study addressed one primary and four subsidiary questions. In this chapter, the first section will address the answers to the research questions. The next section will discuss conclusions. The final section will present areas for future research.

B. RESEARCH QUESTIONS

1. Primary Question: What are comptrollers doing to improve their MTF's performance under the EBC Scorecards indices?

The answer to this question was first addressed in Chapter III, which discussed EBC Scorecard indices; management skills found in a MCO; and tools MTF Comptrollers may use in the performance of their duties. As a result of the MHS implementing a managed care model, the MHS adopted a new financing methodology, EBC. In an effort to make MTF Commanders more responsible for their TRICARE Prime enrollees, Health Affairs will track MTF Commanders performance with the EBC Scorecard. The EBC Scorecard will be used to track six indices. Traditionally MTF Commanders have depended upon their comptrollers for financial advice. The implementation of EBC has not affected this relationship. However, as a result of EBC,

MTF Comptroller must familiarize themselves with initiatives and strategies used by private sector MCOs and the MHS. Chapter III linked the EBC Scorecard indices to strategies and initiatives that could improve performance. Based on the premises presented, questions were created to describe EBC Scorecard indices, skills and tools. Survey questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 19, 20, 21, 22, and 25 were developed to address the EBC Scorecard and the underlying drivers. MTF Comptrollers must use different skills and tools. Therefore, tools and skills that MTF Comptrollers should be aware of and utilize were presented. The survey questions constructed to address tools were questions 12, 13, 15, 16, 17, 18, 23, 26, 27, and 31. Survey questions 14, 24, 28, 29, and 30 were developed to obtain information on skills. The answers to the survey questions were presented in Chapter IV. The analysis of each these components are discussed in greater detail under the subsidiary research questions: Subsidiary question (SQ) 1 addresses the EBC Scorecard indices and strategies, SQ2 addresses roles, SQ3 addresses skills and SQ4 addresses tools. Table 5.1 summarizes the EBC Scorecard Indices, survey questions, answers and research questions.

EBC Scorecard Indices, Skills and Tools used by MTF Comptrollers	Survey Question	Answers to Questions	Related Research Question
EBC Scorecard Indices	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 19, 20, 21, 22, 25,	Chapter 4, Section C	SQ1
Roles	12 , 13	Chapter 4, Q12 and Q13	SQ2
Skills	15, 16, 17, 18, 23, 26, 27, 31	Chapter 4, Section D	SQ3
Tools	14,24,28,29, 30	Chapter 4, Section E	SQ4

Table 5.1. Summary of EBC Scorecard Indices, Survey Questions Answers and Research Questions

During an Executive Management Education Conference, Douglas Braendel presented "Operational Aspects of Enrollment Based Capitation." Braendel (1997) outlines strategies for MTF Commanders and their staff to optimize the delivery of health care services for their enrolled and non-enrolled beneficiaries. He listed the following strategies to maximize revenue:

- Increase capacity;
- Reduce utilization by Prime enrollees;
- Increase productivity;
- Increase capacity for referral services (to meet real demand);
- Market cost effective quality services;
- Reduce unneeded capacity for referral services;
- Outsource services when most cost effective;
- Complete Inpatient records promptly (RCMAS); and
- Assure accurate and timely ADS.

Braendel (1997) further outlines, the keys for success, which are: know your market; know your strengths; know your cost; plan ahead; and business oriented clinical decisions. EBC will require comptrollers to forecast "what if" scenarios at the patient level. This is a significant change from past decision making in that comptroller used department/function level type data. By using CEIS, comptrollers will be able to forecast 'what ifs' with regard to specific patients/patient groups and can use this information to determine which patients are consuming the majority of the resources. The comptrollers

working with their MCDs can implement cost-effective measures. It is the author's assumptions that this new model will require MTF Comptrollers to behave more like CFOs of HMOs.

2. Subsidiary Question (SQ) 1: What initiatives have private sector MCOs and the MHS implemented that MTF Comptrollers can adapt to improve their MTF's score on the EBC Scorecards?

Table 3.1 in Chapter III outlined strategies and initiatives currently employed by private sector MCOs and the MHS linked to EBC Scorecard indices that can be implemented at MTFs and used to improve their MTF performance on the EBC Scorecard. MTF Comptrollers need to familiarize themselves with strategies and initiatives implemented by private sector MCOs and the MHS.

Historically, under the volume-based resource allocation model, the "basic function of the MTF comptroller is to integrate systems for financial management; budget formulation and execution; accounting and disbursing; program analysis; progress reports and statistics; and internal review (FMMTC, 1997). "However with the implementation of capitation financing, comptrollers and patient care areas must coordinate their effects. Financing and patient care must become a team. Kearns (1996) outlined specific responsibilities of MTF Commanders and their staff under capitation methodology; they are summarized as follows:

Understand the process and procedures: Keep a calendar of critical dates; Know capitation allocations; Develop integrated strategic business plan; Study your regional MCS contract; Monitor – BPA adjustments and MTF performance.

Develop objective requirements Know your Mission and MTF; Monitor your population; Evaluate "make vs buy" decisions; Examine sharing

agreements and contracts; Identify your assumptions; and Listen to your people, they are at the grass roots level (those close to the problem).

Manage the Budgets: Understand that Health Affairs regards the budget as three separate budgets, a revenue budget which was capitation, an expense budget which was MERPRs and a statistical budget which was metrics and MEPRS. The bottom line is to evaluate performance and monitor execution.

Recognize Constraints: Incentives are not perfect; Recognize constraints placed upon BUMED which must support multi-MTFs. Size, age, and condition of facility are also factors in the planning process; Recognize constraints on what can or can not be done in the MCS contracts and sharing agreements, as well as problems with adequately projecting staffing and population.

Maintain effective communication links: Effective communication links must be maintained; Everyone must be involved in the process; Be responsive to problems and issues; Accept critical challenges; Strive to avoid surprises (they usually cost money); and encourage creativity.

MTF Comptrollers need to keep current on the latest MCO information and work closely with their MCD. New strategies should be examined and the financial implications determined. Based on the answers given, MTF Comptrollers are not aware of strategies that can be implemented and are totally depending upon their MCDs. MTF Comptrollers need to understand the interrelationship between the actions of their MCDs and their EBC Scorecard, which in the long run may affect their future budgets.

3. SQ2: What do comptrollers view as their role in improving their MTFs performance on EBC Scorecards?

This question was specifically asked on the survey under Q12 and Q13. Based on the answers, 50% of the MTF Comptrollers felt that EBC will have no impact on their role, 25% indicated that in addition to their comptroller duties their job include change

agent - information manager/designer, and the remaining 25% indicated that they were both change agent and planner. The 50-50 split between those MTF, which viewed their role as change agents, can best be explained by looking at those MTFs in older more established managed care regions vice those MTFs in the newer managed care regions. Of the 50% that viewed their role as change agents their MTFs were in some the older managed care regions. Half of the 50% which did not view themselves as change agents were at an MTF, which recently implemented managed care. The 25% that indicated that they were planners were at an MTF that had a Commanding Officer or Executive Officer that are former comptrollers and may go to explain why they listed themselves as planners.

Nice and Jackson (1998) outline specific responsibilities for Resource Managers under EBC, in which understanding the use of the EBC planner and dialoguing with the system staff are essential. Nice and Jackson (1998) state that Resource Managers should:

...become the MTF experts on EBC and integrate the EBC principles into the MTF strategic plan. All MTFs need to understand the use of the EBC planner to help predict the most likely scenario for their MTF. Dialogue with system staff is essential. Advocate the use of resource sharing when applicable. Understand the pricing methodology and pursue worthwhile long-term gains even if O&M, N costs rises. Look at corporate goals vice individual MTF goals and determine what is best for the overall system. In addition to pursuing long-term goals and MHS goals, understand that they will face more ethical issues as their civilian counterparts already do. No may become a valid answer in response to some patient care questions.

Health Affairs also outlines ways that MTF Commanders can succeed under EBC. Health Affairs encourages MTF Commander to work with their executive staff to implement EBC.

4. SQ3: What skills do comptrollers need to help them improve their performance on the EBC Scorecards?

As discussed in Chapter III, managers in private sector MCOs continue to use basic management skills, such as leadership, management, and communication to improve their performance in a managed care environment. They are also applying other skills such as system thinking and change management and recognize the need for unique skills, such as physician leadership (Kongstvedt, 1996). MTF Comptrollers should take the lead with the implementation of EBC (Nice and Jackson, 1998). Based on the answers, MTF Comptrollers are following instead of leading the implementation of EBC. One MTF referred most of the questions to their MCD. Question 13, asked about skills comptrollers are using as a result of EBC, such as change management, management audits, system thinking. Half of the respondents did not indicate that they were using system thinking. One respondent wrote, "EBC has had no impact on my skill level."

5. SQ4: What other tools beside CEIS and SMART should comptrollers incorporate into their "tool box"?

Some of the tools available to MTFs were introduced in Chapter III. Private sector resource mangers are using Learning Labs and forecasting models to improve their performance. Of the MTF Comptroller replying to the survey 100% of the comptrollers answered negatively to the majority of the questions in Chapter IV which referred to tools. Information is essential to the decision-making in a managed care environment.

C. CONCLUSIONS

As a result of conducting this study, the following conclusions are drawn:

Based on the answers given to the questions, MTF Comptrollers do not fully understand the underlying implications that EBC can have on their budget. If they did, they would work closer with their MCD's to ensure that the right mix of services are offered at the MTF so that minimal purchased care is required; to increase capacity where possible; to maximize space available care; to implement Resource Sharing agreements when possible; to develop strategies to incentivize providers and staff; to analyze staffing mix; and budget for infrastructure improvements in the clinical areas.

Minimally, MTF Comptrollers of all ranks should be required to participate via video teleconferencing or distance learning in the TRICARE Financial Management Executive Education Program (TFMEEP) and the resource management portion of the Executive Management Education (EME) course on Utilization Management, Private Sector Lesson Learned, and the two Learning Lab simulations (Risky Business and Mastering the Transition).

The MHS should fund MTF Comptrollers' annual membership into a health management organization, i.e., the American College of Health Care Executive (ACHE), American Academy of Medical Administrators (AAMA). The rational for this recommendation is that in today's capitated environment, comptroller must keep current with the latest health care management information. Currently, personnel must purchase their own membership at a cost of \$250 to \$350 dollars per year. Another area of consideration is attendance at annual health administrators' conferences which is not guaranteed. Benchmarking and networking are the keys to success.

D. RECOMMENDATIONS FOR FUTURE RESEARCH

1. There is a need for the MHS to research the alignment of incentives. In "The Power of Alignment," Labovitz and Rosansky (1997) compare the misalignment of companies to those of a car out of alignment which can be hard to steer and doesn't respond well to changes in direction. At this time, Health Affairs is steering the MHS in the direction of an HMO. The MHS' TRICARE PRIME option looks somewhat like an HMO, it acts somewhat like an HMO, but the key players (providers) in the model don't have the same risk as providers in an HMO. Also, key staff members (Comptrollers) in the MHS model are not leading the change but are reacting to the change. It is essential that all players in the model are aware of how they fit in the model. The first suggested area of research is to fully implement a staff model HMO within the MHS in which provider's bonuses are tied to their productivity. Although the MHS has implemented an HMO-like model, providers assume no risk. Implementing this concept maybe difficult in the MHS because MHS physicians do not have the flexibility to select their own staff. As a part of this recommendation, MHS providers should be given the flexibility to select their staff by establishing "teams" within MTF that work for the provider. All of the members of the team would share in the rewards and bonus of the team. This would require changing legislation to permit MTFs to award "cash awards" to active duty members and exceed the cash award limitations for civilians. Currently, MTF's can incentivize their providers by distributing TPC dollars to the productive clinics. The real incentive is personal financial and nonfinancial awards.

2. Under EBC, the essence of managed care is to create high-quality care at an affordable price through the close coordination of health care service financing and delivery. It is critical for MTF Comptrollers to understand their role in the model and to ensure that their part is performing its critical function (information integration) to the other parts of the system. As Nice and Jackson (1998) outlined, it is essential for Resource Managers to look at corporate goals vice individual MTF goals and determine what is best for the overall system. But in order for Comptrollers to perform this function, they must understand the underlying drivers which can effect their budgets. It is recommended that a study be conducted at the BUMED level for Comptrollers at the three types of facilities: large, medium, and small MTFs; a year after EBC is implemented and MTF Comptrollers have received recommended TFMEEP, EME, and Learning Lab training. The objective of the study would be to evaluate MTF Comptrollers relationship with other departments as a result of capitation based financing and to determine what impact this relationship has had on the MTF performance.

APPENDIX A. SURVEY

Dear MTF Comptrollers and Acting Comptrollers,

I am a sixth quarter Financial Management student at the Naval Postgraduate School working on my thesis. The focus of my thesis is the EBC Scorecard. The purpose is to determine what initiatives private sector managed care organizations (MCOs) have implemented that MTF comptrollers can adopt to help their commanding officers improve their performance under the indices of the EBC Scorecards. Private sector MCOs have tried and tested various strategies to contain cost while maintaining quality and ensuring access to care. Understanding these initiatives and other management tools can help MTF comptrollers improve their performance under EBC criteria. I plan to compare what comptrollers are doing to what private sector MCOs have already done to reduce the underlying effect of cost drivers. In addition, I am scheduled to transfer this July to the Naval School of Health Sciences as an instructor for Financial Management. I hope to use your input to enhance the knowledge of future comptrollers as they begin their careers under EBC.

The criteria I'm looking at under EBC are:

- TRICARE Prime enrollment
- Purchased services for TRICARE Prime enrollees
- Space-available care provided
- Medicare referred in
- Expenses to provide care
- Third Party Collection (reimbursement)
- Resource Sharing

In keeping with this objective, I am requesting input from comptrollers of medium-size MTFs. I select medium-sized MTFs because I feel that you will be able to provide complete services to your beneficiaries. Health Affairs has identified the beneficiary categories as:

- Active Duty (AD)
- Active Duty Family Members (ADFM)
- Retirees and their Family under age 64 (NADD< 65), and
- Retirees and their Family 65+ (NADD>65) (for those MTFs with Senior Option)

Please take a few minutes from your busy schedule to complete the attached questionnaire (filename:questf.doc). Feel free to add lines, as you need. If you do not understand a term, please indicate. Also, indicate if you feel that a function is not your responsibility. Your responses will be kept CONFIDENTIAL. If your department is not performing a questioned function, please indicate who is performing the function and your interaction with as well as feedback from the performing department. As a result of this survey, I hope to present a baseline assessment, describing new skills, tools, and roles that MTF Comptroller can adopt to improve their MTF's performance under the indices of EBC Scorecards.

If possible, please e-mail or fax your responses to me as soon as possible by no later than COB 26 May 1998. Sorry for the quick turn around time but your assistance is BADLY NEEDED. Thanks for your input.

If you have any questions regarding this survey, please call me at (408) 899-0760. My e-mail address is jlucas@nps.navy.mil or fax number (408) 656-2138. Thanks again for your assistance. For follow-up, please send me your telephone number and fax number.

Sincerely,

J. LUCAS
LCDR, MSC, USN

1. Did you ensure that the health of your enrolled user population was assessed?
YES _____ NO _____
2. If you answered yes to question 1, how was the health of the enrolled population assessed?
 - a. Conducted annual HEAR Survey YES _____ NO _____
 - b. Conducted annual HEDIS YES _____ NO _____
 - c. Conducted claims-based assessment YES _____ NO _____
 - d. Other _____
3. Who interpreted your survey?
 - a. Epidemiologist (in-house or contractor) YES _____ NO _____
 - b. You or your staff (Specify who and if they have training in epidemiology or some other survey technique _____) YES _____ NO _____
 - c. The Managed Care Department (Specify who and if they have training in epidemiology or some other survey technique _____) YES _____ NO _____
 - d. Other _____
4. When is the next assessment survey scheduled?
 - a. No survey scheduled. YES _____ NO _____
 - b. Recently (within the past 3 months) completed a survey, no survey scheduled.
YES _____ NO _____
 - c. Survey scheduled to be conducted within the next 6 months. YES _____ NO _____
 - d. Survey scheduled to be conducted within the next 12 months. YES _____ NO _____
 - e. Other _____
5. Did you participate in determining the MTF's maximum capacity? YES _____ NO _____
6. Do you feel that it is your responsibility to ensure that the following initiatives are implemented?
 - a. Disease management protocols for high cost/high volume procedures/care are implemented.
YES _____ NO _____
 - b. Standards to enhance the efficiency and improve productivity of staff. YES _____ NO _____
 - c. Aggressive marketing of the MTF to the PRIME user population. YES _____ NO _____
 - d. Resource sharing agreements are implemented whenever possible. YES _____ NO _____
 - e. Other _____
7. Do you feel that it is your responsibility to ensure that the following programs are implemented to reduce patient demand?
 - a. Patients are aware of telephone-based decision support such as the DoD-wide nurse-staffed telephone services. YES _____ NO _____
 - b. Purchase and distribution of self-care pamphlets and publications on self-management of acute minor illnesses, general information on the use of the medical system, and personal lifestyle management. YES _____ NO _____
List other publications/pamphlets not listed

- c. Classes on self-management of chronic conditions such as arthritis, asthma, diabetes, hypertension, lung disease, and heart disease are conducted (circle classes offered).

YES NO

Indicate classes not listed that are offered

- d. Traditional health promotion programs such as smoking cessation, alcohol abuses, and weight lose are conducted. YES NO (Circle applicable programs).

List other programs that are offered _____

- e. Patients are aware of the computer-based decision support system that they can access from their home computers on DoD-wide health information. YES NO

- f. Computerized, passive media tools are available to your patients. YES NO (Indicate the area i.e., where the systems were deployed, i.e., pharmacy, laboratory, radiology, etc.) _____

- g. List any other programs that you have ensured was implemented to reduce patient demand.
-

8. Have you analyzed which medical and administrative services should be offered in-house and which ones should be outsourced? YES NO

9. If you answered no to question 8, who determines which services are offered in-house or outsourced?

- a. The Managed Care Department (Specify who) YES NO
b. The Patient Administration Department (Specify who) YES NO
c. The Medical Staff (Specify who) YES NO
d. Other _____
-

10. What efforts have you ensured were taken over the past year to market the MTF to PRIME user population (above and beyond status quo required improvements and equipment purchases)?

- a. Budgeted for/purchased infrastructure improvements. YES NO

- b. Budgeted for/purchased equipment for clinical areas. YES NO

- c. Budgeted for/purchased/outsourced technology (i.e., MRI, CAT scan, computers, information systems, and etc.). YES NO

- d. What other actions have you taken to attract PRIME users to your MTF? _____
-

11. What cost containment programs have you recommended for implementation aimed at incentivizing providers?

- a. Risk pool whereby revenue-generating providers are given a portion of the revenue to use in their departments. YES NO

- b. What other programs have you implemented to incentivize your providers? _____
-

12. In addition to your role as a Comptroller, what are some of your other roles as a result of implementation of EBC?

- a. Planner YES NO

- b. Change agent YES NO

- c. Other (Please specify) _____

13. Which of the following skills are you using as a result of EBC?

- a. Change Management YES NO

- b. Management Audits YES NO

c. System Thinking YES _____ NO _____
d. Other (Please specify) _____

14. What information system do you use to forecast (1) enrollment, (2) capacity, (3) utilization, (4) expenses, (5) severity of inpatient and outpatient workload and (6) TPC? Use numbers 1 through 6 to indicate which system is used for each forecast type.
- a. BUMED's SMART 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____
b. CEIS 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____
c. 3M Risk Assessment 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____
d. What other information systems have you recommended for implementation?

15. How often do you discuss the MTF's performance on the EBC Scorecards with the following:

Commanding Officer	Weekly____	Monthly____	Other____	Never____
Executive Officer	Weekly____	Monthly____	Other____	Never____
Director for Administration	Weekly____	Monthly____	Other____	Never____
Directors for Surgical Services	Weekly____	Monthly____	Other____	Never____
Director for Nursing Services	Weekly____	Monthly____	Other____	Never____
Director for Medical Services	Weekly____	Monthly____	Other____	Never____
Director of Ancillary Services	Weekly____	Monthly____	Other____	Never____
Department Heads (i.e., Pharmacy, Lab, X-ray)	Weekly____	Monthly____	Other____	Never____
Individual provider (i.e., High user of MRIs or CT scans)	Weekly____	Monthly____	Other____	Never____
Individual nurse (i.e., OR nurse)	Weekly____	Monthly____	Other____	Never____
Other (Please specify)	Weekly____	Monthly____	Other____	Never____

16. Have you taken steps to ensure that providers and MTF staff personnel are aware of the EBC Scorecard criteria? YES _____ NO _____
17. Are you taking steps to ensure that providers and MTF staff personnel are trained on the EBC Scorecard and its' impact on resources? YES _____ NO _____
18. Are you taking steps to ensure that providers have access to information systems for decision-making?
YES _____ NO _____
19. Are you taking steps to ensure that the satisfaction of your PRIME enrollees is assessed annually?
YES _____ NO _____
- If yes, how is it being assessed?
- a. Conduct an annual HEDIS YES _____ NO _____
b. Conduct an annual HEAR Survey YES _____ NO _____
c. Other _____

20. What percentage of your FY96, FY97, and FY98 APF did you obligate/budget to be spent in the following areas?

FY96 FY97 FY98

Marketing
Smoking Cessation
Alcohol Abuse

Childhood Immunization
Health Promotion
Other Risky behavior (Specify)

21. What are you doing to reduce purchased care cost?
- Implemented resource-sharing agreements. YES _____ NO _____
 - Negotiated supplemental care arrangements with private sector providers. YES _____ NO _____
 - Work closer with consortium MTFs. YES _____ NO _____
 - Other _____
22. When there are variances between budgeted purchased care cost and actual cost, what do you do?
- Discuss variance with specific referring provider YES _____ NO _____
 - Discuss variance with Managed Care Department YES _____ NO _____
 - Other _____
23. As a cost containment effort, have you reduced your civilian hiring?
YES _____ NO _____
24. Have you recommended the implementation of the most efficient organization (MEO) where possible to contain cost? YES _____ NO _____
25. Have you supported the implementation of hospital protocol for the five major prevalent diseases, which can impact on inpatient care?
- | | | |
|---------------|-----------|----------|
| Diabetes | YES _____ | NO _____ |
| Hypertension | YES _____ | NO _____ |
| Asthma | YES _____ | NO _____ |
| Heart Disease | YES _____ | NO _____ |
| Births | YES _____ | NO _____ |
| Other | _____ | |
26. Are you involved with correcting problems with the following information systems? (Please indicate which of the functions fall under your control)
- | | | |
|-------|-----------|----------|
| MEPRS | YES _____ | NO _____ |
| CHCS | YES _____ | NO _____ |
| ADS | YES _____ | NO _____ |
| DEERS | YES _____ | NO _____ |
| Other | _____ | |
27. Are you a member of any clinical committees/PAT teams (i.e., Pharmacy and Therapeutic Committee)
YES _____ NO _____
List other clinical committees you are a member: _____
28. Are you ensuring that the cost, quality, and variation of network providers are monitored with IAMETER or some other software? YES _____ NO _____ (Please indicate the name of the software being used to perform this function _____).
29. Are you involved with risk adjustment analysis? YES _____ NO _____

30. Are you ensuring that physician profiling on in-house physicians is conducted and that variations in practice patterns for the same severity and DRG are addressed? YES NO

31. Have you recommended that your MTF Strategic Plan include the six EBC Scorecard criteria/indices?
YES NO

32. Please provide comments below:

APPENDIX B. GLOSSARY OF TRICARE/MANAGED CARE TERMS AND DEFINITIONS⁴

Access - An individual's ability to obtain medical services on a timely and financially acceptable basis. Ease of access is determined by such other factors as location of health care facilities, transportation and hours of operation.

Accountable Health Plans (AHPs) - Under the Managed Competition Act, providers and insurance companies would be encouraged (through tax incentives) to form AHPs, similar to HMOs, PPOs, and other group practices. AHPs would compete on the basis of offering high-quality, low cost care and would offer insurance and health care as a single product. They would be responsible for looking after the total health of members and reporting medical outcomes in accordance with federal guidelines.

Actuary - a person in the insurance field who decides policy rates and conducts various other statistical studies.

Alternative Delivery System (ADS) - A method of providing health care benefits that departs from traditional indemnity methods. An HMO, for example, can be said to be an alternative delivery system.

Ancillary Care - Additional health services performed, such as lab work or x-rays.

Authorization for Care - The determination that requested treatment is medically necessary, delivered in the appropriate setting, a CHAMPUS and/or TRICARE benefit and that the treatment will cost shared by the DoD through its Managed Care Support contract. All non-availability statement (NAS) assurances need to be prior authorized.

Beneficiary (Also Participant, Enrollee, Eligible Individual, Member) - Any person, either a subscriber or a dependent, eligible for service under a health plan contract.

Capitation - A method of payment for health care services in which a health care provider receives a fixed monthly fee for each enrolled individual (PMPM) regardless of the extent of service actually provided to that person. This contrasts with a fee-for-service payment in which providers are paid separately for each service provided to the patient.

⁴ Source: United States Department of Defense, Office of the Assistant Secretary of Defense for Health Affairs, TRICARE Financial Management Training: Beta Test, Washington, D.C., October 1996.

Case Management - Sometimes referred to as "large case management." A method of managing the provision of health care to members with catastrophic or high cost medical conditions. The goals are to coordinate the case so as to both improve continuity and quality of care as well as lower costs. This is generally a dedicated function in the utilization review department.

Case Mix – The number and frequency of hospital admissions or managed care services utilized, reflecting the assorted needs and uses of a hospital's or managed care organization's resources.

Churning - The practice of a provider seeing a patient more often than is medically necessary primarily to increase revenue through an increased number of services.

Coinurance - A policy provision under which the insured pays or shares part of the medical bill, usually according to a fixed percentage. Major medical expense policies usually provide for coinsurance and deductibles.

Community Rating - The rating system by which a plan or an indemnity carrier takes the total experience of the subscribers or members within a given geographic area or "community" and uses this data to determine a capitation rate that is common for all groups regardless of the individual claims experience of any one group.

Coordinated Care - The federal government's term for managed care. Presumably a more acceptable way of saying it.

Copay - A cost-sharing arrangement in which a covered person pays a specified charge for a specified service, such as \$10 for an office visit.

Credentialing - The most common use of the term refers to obtaining, reviewing, and verifying the documentation of professional providers. Such documentation includes licensure, certifications, insurance, evidence of malpractice insurance, malpractice history and so forth.

Critical Pathways are tools that allows a health care team to reach a defined clinical goal in the most efficient, effective manner with out losing quality.

Days per Thousand - A standard unit of measurement of utilization. Refers to an annualized use of the hospital or other institutional care. It is the number of hospital days that are used in a year for each thousand covered lives.

Deductible - That portion of a subscriber's (or member's) health care expenses that must be paid out of pocket before an insurance coverage applies, commonly \$100-300. Common in insurance plans and PPOs, uncommon in HMOs. May apply only to the out-of-network portion of a point-of-service plan.

Discharge plan - Assesses the patient's medical needs before and after admission to facilitate timely discharge and it begins immediately prior to or at admission. It is an interdisciplinary team approach working with the patient and family to achieve discharge when medically appropriate and to meet health needs after discharge. The use of high-risk assessment tools enhances the identification of the most complex patients. Effective discharge planning minimizes the possibility of re-admission and eliminates lengthy hospitalizations waiting for post-discharge services to be in place.

Experience Rating - The method of setting premium rates based on the actual health care costs experience of a group or groups.

Fee-for-Service (FFS) - With respect to the physician or other supplier of service, this refers to the payment of specific amounts for specific services rendered on a service unit basis as opposed to a retainer, salary or other contract arrangement.

Gatekeeper - An informal, though widely used, term that refers to a primary care case management model health plan. In this model, all care from providers other than the primary care physician, except for true emergencies, must be authorized by the primary care physician before care is rendered. This is a predominant feature of almost all HMOs.

Health Maintenance Organization (HMO) - The definition of an HMO has changed. Originally an HMO was defined as a prepaid organization that provided health care to voluntarily enrolled members in return for a preset amount of money on a per member per month (PMPM) basis. For the patient, it means reduced out-of-pocket costs (i.e., no deductible), no paperwork (i.e., insurance forms), and only a small copayment for each visit to cover the paperwork handled by the HMO. With the increase in self-insurable business, or with financial arrangements that do not rely on prepayment, the definition is no longer accurate. Now that definition needs to encompass two possibilities: a health plan that places at least some of the providers at risk for medical expenses and a health plan that utilizes primary care physicians as gatekeepers (although there are some HMOs that do not). There are five types of HMOs, which are presented as follows:

Staff-Model

The staff model HMO is the purest form of managed care. Popularized by Kaiser Permanente, one of the pioneers of the HMO movement, all of the physicians are in a

centralized site, in which all clinical and perhaps inpatient services and pharmacy services are offered. The HMO holds the tightest management reins in this setting, because none of the physicians traditionally practice on an independent fee-for-service basis. Physicians are more employees of the HMO in this setting, as they are not in a private or group practice.

Individual Practice Association-Model (IPA)

The individual practice association contracts with independent physicians who work in their own private practices, and treat fee-for-service patients as well as HMO enrollees. They are paid by capitation for the HMO patients and by the conventional means for their fee-for-service patients. Physicians belonging to the IPA guarantee that the care needed by each patient for whom they are responsible will fall under a certain amount of money. They guarantee this by allowing the HMO to withhold an amount of their payments (i.e., usually about 20% per year). If, by the end of the year, the physician's cost for treatment falls under this set amount, then the physician receives his entire "withhold fund." If the opposite is true, the HMO can then withhold any part of this amount, at its discretion, from the fund. Essentially, the physician is put "at risk" for keeping down the treatment cost. This is the key to the HMO's financial viability.

Group-Model

The Group- Model HMO, the HMO contracts with a physician group, which is paid a fixed amount per patient to provide specific services. The administration of the group practice then decides how the HMO payments are distributed to each member physician. This type of HMO is usually located in a hospital or clinic setting and may include a pharmacy. These physicians usually do not have any fee-for-service patients.

Hybrid-Model

A combination of at least two managed care organizational models that are melded into a single health plan. Since its features do not uniformly fit only one type of model, it is called a hybrid.

Network-Model

A network of group practices under the administration of one HMO.

Point-of-Service Model

Sometimes referred to as an “open-ended” HMO, the point-of-service model is one in which the patient can receive care either by physicians contracting with the HMO or by those not contracting. Physicians not contracting with the HMO but who see an HMO patient are paid according to the services performed. The patient is incentivized to utilize contracted providers through the fuller coverage offered for contracted care.

Indemnity Plan (Indemnity Health Insurance) - A plan that reimburses physicians for services performed or beneficiaries for health expenses incurred. Such plans are contrasted with group health plans, HMOs, PPOs, which provide service benefits through group medical practices and/or independent practice associations (IPAs).

Inpatient – A patient admitted to the hospital and who is receiving services under the direction of a physician for at least 24 hours.

Integrated Delivery System (IDS) - A newer term that is characterized by broad geographic coverage, “one stop shopping” for contract purposes, utilization review and quality assurance, “seamless” continuum of care from the primary physician to tertiary services and the shift to financial risk to the provider group in order to control costs.

Long-Term Care Services – ordinarily provided in a skilled nursing, intermediate care, personal-care, supervisory-care, or elder-care facility.

Managed Care Organization (MCO) - A generic term that describes organizations that manage and control medical service. It includes HMOs, PPOs, Competitive Medical Plans (CMPs), managed indemnity insurance programs, and managed Blue Cross/Blue Shield (BC/BS) programs.

Managed Health Care - A system of health care delivery that tries to manage the cost of health care, the quality of health care, and the access to that care. Common denominators include a panel of contracted providers that is less than the entire universe of available providers, some type of limitations on benefits to subscribers who use non-contracted providers (unless authorized to do so), and some type of authorization system. Managed health care is actually a spectrum of systems, ranging from so-called indemnity, through PPOs, POS, open panel HMOs and closed panel HMOs.

Open Enrollment – A period during which a managed care organization allows persons not previously enrolled to apply for plan membership.

Outcomes Management - An approach to managing patient care in which the desired outcome for the patient is determined first, then the necessary health care resources are allocated to achieve the desired outcome.

Outlier – One who does not fall within the norm; typically used in utilization. A provider who uses too many services or too few services (for example, anyone whose utilization differs 2 standard deviations from the mean on a bell curve) are termed outliers.

Out-of-Pocket Costs – The share of health services payments paid by the enrollee.

Outpatient – A patient who receives health care services without being admitted to a hospital.

Per Member Per Month (PMPM) - Specifically applies to a revenue or cost for each enrolled member each month.

Primary Care Physician (PCP) (or Primary Care Manager (PCM)) - Generally applies to internists, pediatricians, family practice physicians, general practitioners, and occasionally to obstetricians and gynecologists. The primary care physician in managed care often acts a gatekeeper.

Point of Service (POS) - This type of health plan furnishes different levels of coverage (and out-of-pocket expense to the member) depending on whether the member uses the health care providers designated by the plan or goes outside the plan for health services (e.g., 100% coverage rather than 70%). The term may be applied to an HMO or a gatekeeper PPO. In the case of an HMO (or HMO-like) system, the member is enrolled in both an HMO and an indemnity plan. The term “triple choice” to employees means options that include an HMO, PPO, and an indemnity plan.

Precertification - The process of obtaining certification or authorization (for reimbursement purposes) from the health plan for services to be provided to a member, most commonly related to hospitalizations. However, the process is being increasingly applied to other services such as outpatient surgery, costly diagnostic procedures, etc.

Prospective Payment System (PPS) - A generic term applied to a reimbursement system that determines payment per unit prospectively rather than on the basis of provider charges. A typical example is a per diem payment arrangement for hospital reimbursement, also a Diagnostic Related Group (DRG) payment.

Rating – The method that is used to determine the cost of premiums to the members of a managed health care or indemnity insurance plan.

Reinsurance - (also stop loss) - Insurance purchased by a health plan to protect it against payment for extremely high cost cases.

Retrospective Review – A review of services after the services are rendered, which can result in denial of payment after the service has been performed if the providers within the plan do not follow appropriate protocol. This type of review can also be conducted post discharge to determine patterns of utilization of resources.

Risk Arrangement - a payment method whereby it has been agreed that services will be provided for a fixed, predetermined amount of money regardless of the extent, expense or degree actually required by the enrollees. Capitation is an example of a risk arrangement or “at risk” as applied to a health plan and/or individual provider.

Screening – The method by which managed care organizations limit access to health care for unnecessary reasons. In most HMOs, a phone call to the physician or his or her medical office staff is required before an office visit can be arranged. “Gatekeepers” and concurrent review are other methods of screening patients.

Underwriting - Commonly refers to the analysis of an employee group that is done to determine premium rates, or to determine whether the group should receive coverage at all due to high risk; high medical expenses.

APPENDIX C. HISTORY OF RECOMMENDATIONS AND ACTIONS ON CAPITATION FINANCING IN THE DOD'S MEDICAL PROGRAM⁵

December 1975 -- "Report of the Military Health Care Study," a major two-year study directed by the President of the United States in August 1973, and conducted by the Department of Defense (DoD), the Department of Health, Education, and Welfare (HEW), and the Office of Management and Budget (OMB).

Recommendation No. 5 (the report contained nine recommendations):

"Resource programming and budgeting for the MHSS in CONUS should be done on a **capitation basis**."

July 1993 -- "Preparing the Military Health Service System (MHSS) for Capitation-based Resource Allocation," a policy memorandum, dated July 23, 1993, from the Acting Assistant Secretary of Defense (Health Affairs) directing the implementation of the FY94 Capitation Methodology for the Military Departments to be used in allocating FY94 Defense Health Program (DHP) funds.

April 1994 -- "The Economics of Sizing the Military Medical Establishment -- Executive Report of the Comprehensive Study of the Military Medical Care System," directed by Section 733 of the National Defense Authorization Act for Fiscal Years 1992 and 1993, and further modified by Section 723 of the Fiscal Year 1993 National Defense Authorization Act, and conducted by the Department of Defense, Office of Program Analysis and Evaluation, concluded that:

"DoD can cost-effectively size to peacetime requirements only if it manages the demand effect through a combination of (*four items, one of which is shown here*):

- Managed care and **capitation budgeting**, possibly including copayments and deductibles for care received in MTFs."

May 1994 -- "Defense Planning Guidance FY1996 - 2001," dated May 23, 1994, page 61, regarding the medical infrastructure:

⁵ Source: United States Department of Defense, Office of the Assistant Secretary of Defense for Health Affairs, Enrollment Based Capitation Handbook, Washington, D.C., 1998.

"Peacetime medical expenses should continue to undergo aggressive review. The Assistant Secretary of Defense (Health Affairs) will continue to implement plans to control medical costs, including the use of **capitation financing methodology to support medical facility budgets**, and devise methods for directing patients to the most appropriate sources of treatment, such as gatekeeping and utilization management."

March 1995 -- Representatives from the Offices of the Director, Program Analysis and Evaluation and the Assistant Secretary of Defense (Health Affairs) co-chaired a working group to study the structure of medical programming in the DoD and **to refine the current capitation model for analyzing Defense Health Program (DHP) resource requirements**. This effort was intended to form the basis for work by a Program Review Issue Team for the FY97-01 Program Review.

May 1995 -- "Defense Planning Guidance FY1997 - 2001," dated May 9, 1995, page 65, regarding the medical infrastructure:

"...The Assistant Secretary of Defense (Health Affairs) will control medical costs **by using the capitation financing methodology to support medical facility program development, budget formulation and execution**, and to devise methods for directing patients to the most appropriate sources of treatment, such as gatekeeping and utilization management."

May 1996 -- "Defense Planning Guidance FY1998 - 2003," dated April 10, 1996, page 75, regarding the medical infrastructure:

"...The Assistant Secretary of Defense (Health Affairs) will control medical costs **by using the capitation financing methodology to support medical facility program development, budget formulation and execution**, and to devise methods for directing patients to the most appropriate sources of treatment, such as gatekeeping and utilization management."

LIST OF REFERENCES

Aiken, L.H. and Mechanic, D., eds., Paying for Services: Promises and Pitfalls of Capitation, Jossey-Bass, San Francisco, CA, 1989.

Beckhard, R. and Harris, R.T., Organizational Transitions: Managing Complex Change, Addison-Wesley, 1987.

Braendel, D.A., Briefing Paper "Operational Aspects of Enrollment Based Capitation," Executive Management Education, Monterey, CA, 7-11 April 1997.

Burke, J.W., "Selective Medical Provider Contracting," Managed Care: Integrating The Delivery and Financing of Health Care, Part B, Health Insurance Association of America: Washington, DC, 1996.

Buss, P., CAPT, MC, USN, Briefing Paper, "Utilization Management," Executive Management Education, Monterey, CA, 7-11 April 1997.

"Change, Complexity, Systems Thinking, think and Organizational Learning," High Performance Systems Inc., Hanover, NH, undated.

Cleverly, W.O., Briefing Papers, "Financial Management in a Managed Care Environment," undated.

Congressional Budget Office, Statement of Neil M. Singer (Acting Assistant Director, National Security Division) on Reforming the Military Health Care System before the Subcommittee on Military Forces and Personnel Committee on Armed Services, 19 April 1994.

_____, Statement of Robert D. Reischauer (Director), before the Subcommittee on Military Forces and Personnel Committee on Armed Services, 10 May 1993.

Department of Defense, Department of Health, Education, and Welfare, and Office of Management and Budget, Report of the Military Health Care Study, December 1975, p. 9.

Desbrow, S., Briefing Papers, "TRICARE Contracting," for the TRICARE Financial Executive Management Education Program, Monterey, CA, 3-6 December 1996.

Doyle, R., Briefing Paper, "Health Care and the Military: Resources and Reforms," Executive Management Education, Monterey, CA, 11-12 May 1998.

Dufresne, M.R., "Evaluating Managed Care Networks: An Approach to Providing Cost-Effective Health Care to Employees," American Compensation Association, 1995.

Eastaugh, S.R., Health Care Finance – Economic Incentives and Productivity Enhancement, Westport, CT: Auburn House, 1992.

Freeborn, D.K. and Pope, C.R., "Promise and Performance in Managed Care: The Prepaid Group Practice Model," (Baltimore: The Johns Hopkins University Press, 1994, p. 1.

Hirsch, G. B. and Kemeny, J. M., "Mastering the Transition to Capitation," Healthcare Forum Journal, May/June 1994.

Holmes, R., LTC, USA, "Relevant Cost Decision-Making," Army Medical Department Journal, PB 8-96-1/2 January/February, 1996.

Horowitz, J.L., Briefing Paper, "Assessing Organizational Readiness For Capitation and Risk Sharing," Foundation of the American College of Healthcare Executives, Managing Under Capitation, Western Conference, 14 November 1996.

Joint Commission on Accreditation of Healthcare Organizations webpage, 1998.
Available at URL HYPERLINK <http://www.jcaho.com> <http://www.jcaho.com>

Kearns, W.P., Briefing Paper "MTF TRICARE Budgeting," for the TRICARE Financial Executive Management Education Program, Monterey, CA, 3-6 December 1996.

Kolb & Horowitz, "Managing the Transition to Capitation," Healthcare Financial Management, Vol. 49, 1 February 1995.

Kongstverdt, P. R. ed., Essentials of Managed Health Care, Gaithersburg, MD: Aspen Publishers, Inc., 1995.

Kongstverdt, P. R. ed., The Managed Health Care Handbook, Gaithersburg, MD: Aspen Publishers, Inc., 1996.

Labovitz, G. and Rosansky, V., The Power of Alignment: How Great Companies Stay Centered and Accomplish Extraordinary Things, John Wiley and Sons, Inc., New York, 1997.

MacLoad, G.K., "An Overview of Managed Care," Hospital and Health Networks, V. 70, 20 April 1995.

Managed Care: A Health Strategy for Today and Tomorrow, Health Insurance Association of America: Washington, DC, 1993, pp. 32-33.

Managed Care: Integrating The Delivery and Financing of Health Care, Part B, Health Insurance Association of America: Washington, DC, 1996.

Mastering the Transition to Capitation (Learning Lab Simulation Workbook), Healthcare Forum, undated.

McDonald, C.L., CDR, MSC, USN, BUMED (MED-01), "Capitation Financing," E-mail of 15 April 1998.

McNamee, E., "Governance and Management Structure," Managed Care: Integrating The Delivery and Financing of Health Care, Part B, HIAA: Washington, DC, 1996

Metzger, N., Handbook of Health Care Human Resources Management, Rockville, MD: Aspen Publishers, Inc., 1990, pp. 21-26.

National Research Corporation webpage, 1998. Available URL: <http://www.nationalresearch.com>

Nice, P., COL, MSC, USAF and Jackson, W., MAJ, MSC, USAF, Briefing Papers, "Winning with EBC," 24 February 1998.

Pellack, J. J. LCDR, MSC, USN, BUMED (MED-01), Telephonic Interview, Washington, DC, April 1998.

Prince, T. R., Financial Reporting and Cost Control for Healthcare, AUPHA Press/Health Administration Press, Arlington, VA, 1992.

Office for the Prevention and Health Services Assessment (OPHSA) webpage, 1998, Available at URL: <http://www.Ophsa.books.af.mil>

Risky Business: Mastering the New Business of Health (Learning Lab Simulation Workbook), Healthcare Forum, 1995.

Scaramozzino, J.A., CAPT, MSC, USN, (Director, Health Resource Study Center, Monterey, CA), Personal Interview, January 1998, February 1998, March 1998, May 1998, June 1998.

Southam, A.M., "Network Administration and Provider Relations," Managed Care: Integrating The Delivery and Financing of Health Care, Part B, HIAA: Washington, DC, 1996.

Thompson, M., "Financing Budgeting and Rating," Managed Care: Integrating The Delivery and Financing of Health Care, Part B, HIAA: Washington, DC, 1996.

Turnbull, N., Briefing Paper "Private Sector Managed Care," for the TRICARE Financial Executive Management Education Program, Monterey, CA, 21 October 1996.

United States Department of Defense, Office of the Assistant Secretary for Health Affairs, Washington, DC: MTF Enrollment-Based Capitation Program, Washington, DC, 1997.

Policy for Guidelines for Implementing Managed Care Reforms in the Military Health System, Washington, DC, 22 February 1994.

Policy on Medical Treatment Facilities (MTF) Enrollment-Based Capitation Resource Allocation for the Military Health Services System, Washington, DC, 7 April 1997.

Policy Paper on Preparing the Military Health Service System (MHSS) for Capitation-Based Resource Allocation, Washington, DC, 23 July 1993.

"Testimony Before the Subcommittee on Military Personnel, Committee on National Security, House of Representatives, Defense Health Care, DoD's Managed Care Program Continues to Face Challenges, Washington, DC, 28 March 1995.

United States General Accounting Office, "Report to Congressional Requestors, Defense Health Care," Issues and Challenges Confronting Military Medicine, Washington, DC 22 March 1995.

United States Department of the Navy, Bureau of Medicine and Surgery, A Navy Medical Department Overview: Quality of Life Master Plan, Washington, DC, 13 October 1995.

United States Department of the Navy, Bureau of Medicine and Surgery, Naval School of Health Sciences, Financial and Material Management Training Course, Washington, DC, 1997.

Varga, J.H., Briefing Paper, "Utilization Management for Military Provider and Admininitrator" for the TRICARE Financial Executive Management Education Program, Monterey, CA, 16 October 1996.

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